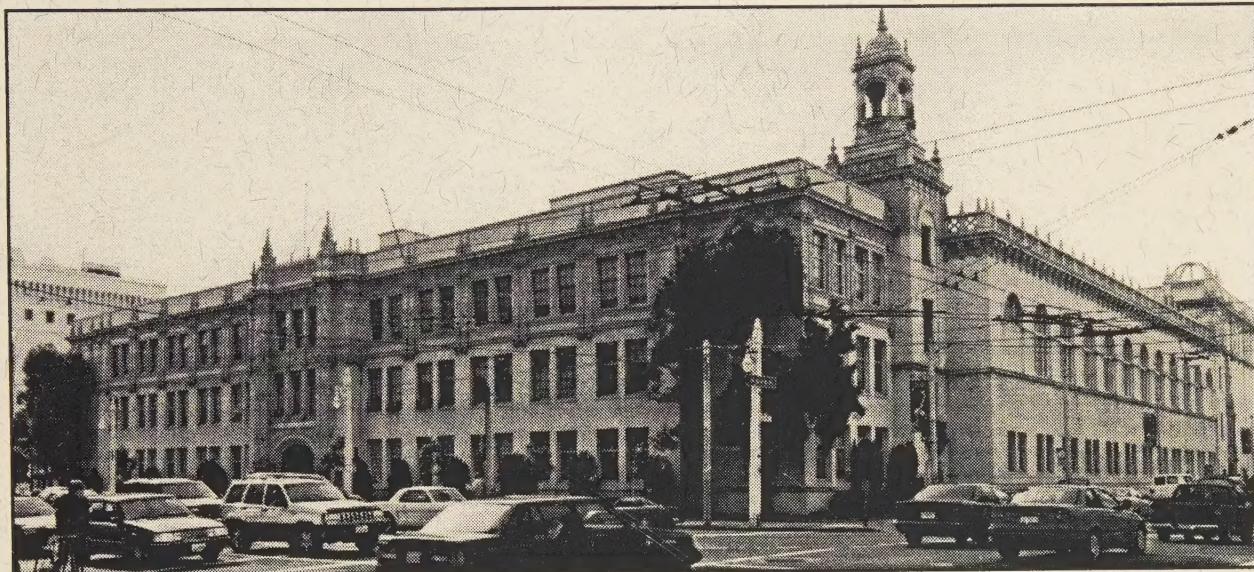


San Francisco Unified School District

School of the Arts Master Plan



Draft Environmental Impact Report

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

DEC - 9 1997

Draft EIR Publication Date: December 1, 1997
Draft EIR Public Hearing Date: January 19, 1998, Everett Middle School, 450 Church Street, 6PM
Draft EIR Public Comment Period: December 1, 1997 to January 19, 1998

UNIVERSITY OF CALIFORNIA

Written comments should be sent to:
The Environmental Review Officer
San Francisco Unified School District
1551 Newcomb Avenue, San Francisco, CA 94124-1234

**SFUSD SAN FRANCISCO
UNIFIED SCHOOL DISTRICT
FACILITIES PLANNING & CONSTRUCTION**

DATE: December 1, 1997

TO: Distribution List for the School of the Arts Master Plan Draft EIR
FROM: Tim Tronson, Environmental Review Officer
SUBJECT: Request for the Final Environmental Impact Report for the
School of the Arts Master Plan

This is the Draft of the Environmental Impact Report (EIR) for the School of the Arts Master Plan. A public hearing will be held on the adequacy and accuracy of this document on January 19, 1998 at the Everett Middle School, 450 Church Street at 6:00 P.M. After the public hearing, our office will prepare and publish a document titled "Summary of Comments and Responses" which will contain a summary of all relevant comments on this Draft EIR and our responses to those comments; it may also specify changes to this Draft EIR. Public agencies and members of the public who testify at the hearing on the Draft EIR will automatically receive a copy of the Comments and Responses document, along with notice of the date reserved for certification; others may receive such copies and notice on request or by visiting our office. This Draft EIR together with the Summary of Comments and Responses document will be considered by the San Francisco Unified School District Board of Education in an advertised public meeting and certified as a Final EIR if deemed adequate.

After certification, we will modify the Draft EIR as specified by the Comments and Responses document and print both documents in a single publication called the Final Environmental Impact Report. The Final EIR will add no new information to the combination of the two documents except to reproduce the certification resolution. It will simply provide the information in one rather than two documents. Therefore, if you receive a copy of the Comments and Responses document in addition to this copy of the Draft EIR, you will technically have a copy of the Final EIR.

We are aware that many people who receive the Draft EIR and Summary of Comments and Responses have no interest in receiving virtually the same information after the EIR has been certified. To avoid expending money and paper needlessly, we would like to send copies of the Final EIR to private individuals only if they request them.

If you would like a copy of the Final EIR, therefore, please fill out and mail the postcard provided inside the back cover to the Office of Environmental Review within two weeks after certification of the EIR. Any private party not requesting a Final EIR by that time will not be mailed a copy. Public agencies on the distribution list will automatically receive a copy of the Final EIR.

Thank you for your interest in this project.



Digitized by the Internet Archive
in 2025

<https://archive.org/details/C124919865>

**SCHOOL OF THE ARTS PROJECT
PRELIMINARY DRAFT ENVIRONMENTAL IMPACT REPORT**

TABLE OF CONTENTS

	Page
1. INTRODUCTION	1-1
2. SUMMARY	2-1
A. Project Description and Site Characteristics	2-1
B. Main Environmental Effects and Mitigation Measures	2-2
C. Alternatives to the Proposed Project	2-2
3. PROJECT DESCRIPTION	3-1
A. Project Sponsor's Objectives	3-1
B. Project Location	3-1
C. Project Characteristics	3-3
D. Project Schedule, Cost, and Approval Requirements	3-14
4. ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES	4-1
A. Land Use and Zoning	4-2
B. Architectural and Historic Resources	4-6
C. Transportation	4-29
D. Air Quality	4-53
E. Noise	4-59
5. IMPACT OVERVIEW	5-1
A. Significant Environmental Effects That Cannot Be Avoided If the Proposed Project Is Implemented	5-1
B. Growth Inducement	5-1
6. ALTERNATIVES TO THE PROPOSED PROJECT	6-1
A. Alternative A: No Project	6-1
B. Alternative B: Preservation and Adaptive Reuse	6-4
Variant 1: Preservation of 170 Fell Street	6-6
Variant 2: Preservation of 170 Fell Street, Library and Gymnasium Wings	6-14
Variant 3: Preservation of 170 Fell Street, different use for Library and Gymnasium Wings	6-25
C. Alternative C: Non-SOTA Use	6-37
7. DRAFT EIR DISTRIBUTION LIST	7-1
8. EIR AUTHORS, EIR CONSULTANTS, AND ORGANIZATIONS AND PERSONS CONSULTED	8-1
9. APPENDICES	9
Appendix A: Initial Study	9-1

Appendix B: Architectural Resources	9-23
Appendix C: Transportation	9-25
Appendix D: Air Quality	9-32

LIST OF FIGURES

1. School of the Arts Project Location	3-2
2. 135 Van Ness Avenue East Elevation	3-4
3. 135 Van Ness Avenue South Elevation	3-5
4. 170 Fell Street East Elevation	3-6
5. 170 Fell Street West Elevation	3-7
6. 170 Fell Street South Elevation	3-8
7. Project First Level Floor Plan	3-10
8. Project Second Level Floor Plan	3-11
9. Project Third Level Floor Plan	3-12
10. Project Fourth Level Floor Plan	3-13
11. Land Uses in the Project Vicinity	4-3
12. Architectural Resources in the Project Vicinity	4-8
13. Project Area Photograph: Project Site from the Roof of 25 Van Ness Avenue Looking North	4-11
14. Project Area Photograph: Fell and Franklin Streets Looking North	4-12
15. Project Area Photograph: Van Ness And Fell Street Looking West	4-13
16. Project Area Photograph: Hayes and Franklin Streets Looking South	4-14
17. Project Area Photograph: from the 135 Van Ness Avenue Building Looking West Across Interior Courtyard	4-15
18. Photomontage from the Roof of 25 Van Ness Avenue Looking North	4-22
19. Photomontage From Fell and Franklin Streets Looking North	4-23
20. Photomontage from Hayes and Franklin Streets Looking South	4-24
21. Photomontage from the 135 Van Ness Avenue Building Looking West Across Interior Courtyard	4-25
22. Street Network and Transit Routes in the Project Area	4-32
23. Traffic Study Intersections and Arterials	4-45
24. Alternative B-1: North Elevation of 170 Fell Street Building	6-8
25. Alternative B-1: East Elevation of 170 Fell Street Building	6-9

26.	Alternative B-1: South Elevation of 170 Fell Street Building	6-10
27.	Alternative B-1: West Elevation of 170 Fell Street Building	6-11
28.	Alternative B-2: Lower Level 170 Fell Street Building	6-16
29.	Alternative B-2: First Level 170 Fell Street Building	6-17
30.	Alternative B-2: Second Level 170 Fell Street Building	6-18
31.	Alternative B-2: Third Level 170 Fell Street Building	6-19
32.	Alternative B-2 & 3: Section - Looking West, 170 Fell Street Building	6-20
33.	Alternative B-2 & 3: Section - Looking North, 170 Fell Street Building	6-21
34.	Alternative B-2 & 3: First Level South Wing 135 Van Ness Avenue Building	6-26
35.	Alternative B-2 & 3: Elevations South Wing 135 Van Ness Avenue Building	6-27
36.	Alternative B-3: Lower Level 170 Fell Street Building	6-28
37.	Alternative B-3: First Level 170 Fell Street Building	6-29
38.	Alternative B-3: Second Level 170 Fell Street Building	6-30
39.	Alternative B-3: Third Level 170 Fell Street Building	6-31
40.	Alternative B-3: (First and Second Levels) North Wing 135 Van Ness Avenue	6-32
41.	Alternative B-3: Third Level North Wing 135 Van Ness Avenue Building	6-33
42.	Alternative C: North Elevation of 170 Fell Street Building	6-39
43.	Alternative C: East Elevation of 170 Fell Street Building	6-40
44.	Alternative C: South Elevation of 170 Fell Street Building	6-41
45.	Alternative C: West Elevation of 170 Fell Street Building	6-42

	Page
<u>LIST OF TABLES</u>	
1. Table S-1: Summary of Impacts and Mitigation Measures	2-3
2. AM Peak Hour Person-Trip Generation	4-43
3. AM Peak Hour Vehicle-Trip Generation	4-43
4. Intersection Level of Service	4-46
5. Arterial Level of Service Future (Year 2010) Cumulative (Incl. Project) Conditions - Weekday AM Peak Hour	4-48
6. Existing and Projected Curbside Carbon Monoxide Concentrations at Selected Intersections	4-58
7. Project Regional Emissions in Pounds Per Day	4-59
8. Noise Measurements	4-60
9. Cost Comparisons of the Replacement Building at 170 Fell Street and the two SOTA Adaptive Reuse Alternatives	6-6

1. INTRODUCTION

This Environmental Impact Report (EIR) evaluates the potentially significant environmental effects associated with the proposed School Of The Arts Project (SOTA) in San Francisco. The analysis contained herein address project-specific and cumulative impacts to which the project would contribute.

This EIR, for the purposes of impact analysis, evaluates the effects of development or rehabilitation of three buildings within the project block: 135 Van Ness Avenue, The Nourse Auditorium, and 170 Fell Street. The project block is bounded by Van Ness Avenue, Hayes Street, Franklin Street and Fell Street and is owned by the San Francisco Unified School District (SFUSD).

Pursuant to Sections 15051 and 15367 of the Guidelines for Implementation of the California Environmental Quality Act, the SFUSD is the Lead Agency which has the principal responsibility for carrying out or approving the project and determining that an EIR is required.

Reference documents cited in this Draft EIR are available for public review at the Superintendent's Office, San Francisco Unified School District, 1551 Newcomb Avenue, San Francisco.

2. SUMMARY

A. PROJECT DESCRIPTION

The proposed project is the School of the Arts (SOTA) Master Plan which entails the relocation and expansion of the school. SOTA was established in 1981 and was located at McAteer High School for ten years. In 1991, SOTA became a separate high school. SOTA is a magnet school, which serves the entire Bay Area. Currently, SOTA is housed in an old surplus elementary school on Font Street adjacent to San Francisco State University.

The new SOTA campus would also serve as a resource for the arts for the entire school district to enhance the arts skills of the district teachers. In addition to individual artists, institutions such as the San Francisco Symphony, would be offered teaching positions at SOTA. SOTA students would participate in community services and serve as resources to other district schools.

The proposed project would be located in the Civic Center area of San Francisco, on the block bounded by Van Ness Avenue, Hayes Street, Franklin Street and Fell Street. The three existing buildings on site (135 Van Ness Avenue, The Nourse Auditorium, and 170 Fell Street) house various administrative offices of the SFUSD. These buildings surround an interior court which is currently used for parking approximately 60 cars. Vehicular access to the courtyard is from Franklin Street.

The proposed new SOTA would entail the adaptive reuse of the 135 Van Ness Avenue (a City-designated Landmark Building) and the Nourse Auditorium, and the demolition of the existing 170 Fell Street Building and construction of a new structure of similar size. The central courtyard would be redesigned to provide a landscaped gathering space for students. The main entrance to the complex would be from Fell Street between the new 170 Fell Street Building and the south wing of the renovated 135 Van Ness Avenue Building.

The current administrative staff of the SFUSD would be relocated into other SFUSD owned or leased space. The SOTA complex would have the following components:

135 Van Ness Building: The entire building would be renovated, including the north and south wings, which would consist of seismic retrofit and other upgrades to bring this building into compliance with applicable State law governing construction of schools. This building would be the main SOTA classroom building for the arts and academic classes: the first floor would have a reception area, the principal's office, administrative offices and meeting rooms, a library, computer laboratory, and classrooms for chemistry, biology, physics and earth sciences; the second floor would include classrooms for English and Foreign languages, an audio language laboratory, and faculty offices; the third floor would feature classrooms for mathematics, social studies, a seminar room, and faculty offices. The fourth floor penthouse would contain faculty offices. The South Wing would comprise a rehearsal hall and the North Wing (the old gymnasium) would be devoted to the visual arts.

Nourse Auditorium The auditorium building would be renovated, including floors, doors and frames, elevator, plumbing, tile cleaning and replacement and provision for disabled access. The Nourse Auditorium would be dedicated to arts presentations for the entire school district and for SOTA students to be educated in subjects related to Theater arts.

170 Fell Street The new building at 170 Fell Street would be similar in size, scale and height to the demolished 170 Fell Street Building. The new building would have additional studios and classrooms for the performing arts, galleries for displaying works of students and professionals, and dressing rooms and other supportive functions for the Nourse Auditorium. It would also serve as the Center for Arts Education for the training of all teachers in the school system and galleries.

No off-street parking is proposed for the project. When the project is completed in 2000, the new SOTA complex would provide an expanded capacity for up to a maximum of 1,000 students.

B. ENVIRONMENTAL EFFECTS

Table S-1, below, summarizes the potential environmental impacts of the proposed project and corresponding mitigation measures (where applicable), and identifies the level of significance (i.e., significant, less than significant) after implementation of the proposed mitigation measures.

C. ALTERNATIVES TO THE PROPOSED PROJECT

In addition to the No Project Alternative, this EIR analyzes two development alternatives in Chapter 6, Alternatives to the Proposed Project. The principal objective of Alternative B is to preserve the existing 170 Fell Street Building and adaptively reuse the building for school

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<p><u>Land Use</u></p> <p>A1: The proposed project would relocate the School of the Arts to the 135 Van Ness Avenue complex and revert the present office use to educational/institutional. This would be a less than significant impact.</p>	None required.	Less than significant.
<p>A2: The proposed project would intensify the uses at the project site. The proposed land use intensification, in and of itself, would be less than a significant impact.</p>	None required.	Less than significant.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<p><u>Architectural and Historic Resources</u></p> <p>B.1: Demolition of the 170 Fell Street building would have a significant impact on historic resources of the High School of Commerce site.</p>	<p>B1: To address the impacts associated with the demolition of the building at 170 Fell Street, the applicant shall prepare documentation in accordance with the Historic American Buildings Survey (HABS) standards prior to demolition. Archival quality, large format photographs (or videotape) of the interior and exterior of the building at 170 Fell Street should be included in the HABS documentation. A major public historical archive (e.g., the San Francisco Public Library) should be the repository of the HABS document. Upon implementation, this measure would ensure that documentation regarding the history and architectural style associated with the building at 170 Fell Street would exist for future research and reference.</p>	<p>Significant.</p>

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
B2: The School of the Arts project would adaptively reuse the 135 Van Ness Avenue building, north and south wings, and the Nourse Auditorium. This would be a less than significant impact.	None required.	
<u>Transportation</u> C1: Traffic-generated impacts by the proposed project would result in slight increases in vehicle delay at most of the study intersections, but service levels would not change. This would be a less than significant impact.	None required.	Less than significant.
C2: Under cumulative conditions with the project, six of the eight study intersections would continue to operate at acceptable levels of service. The Van Ness Avenue/Fell Street and Laguna Street/U.S. 101 Off-Ramp intersections would operate at LOS F. This would not be a significant project-generated impact.	None required.	Less than significant.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION/IMPROVEMENT MEASURE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
C3: Under cumulative conditions with the project, the arterials would continue to operate at acceptable levels of service. This would not be a significant project-generated impact.	None required.	Less than significant.
C4: Project transit trips would contribute to the demand for transit service. This impact would be less than significant.	None required.	Less than significant.
C5: The proposed project would contribute to the parking demand in the Civic Center area. This impact would be less than significant.	None required.	Less than significant.
C6: The proposed project would increase the volume of pedestrians at the crosswalks. This impact would be less than significant.	Improvement Measure C6: Provide passenger loading zones for SOTA related activities.	Less than significant.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION/IMPROVEMENT MEASURE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
<p>C7: Project construction traffic would cause potential truck queuing and lane closures, and could have a temporary impact on peak hour conditions on adjacent streets in the project area. This impact would be less than significant, but would be improved by Improvement Measure C7.</p>	<p>Improvement Measure C7: The project sponsor would direct its contractor to limit truck traffic to avoid peak periods between 7:00 a.m. and 9:00 a.m. or between 3:30 p.m. and 6:00 p.m. to the maximum extent feasible in order to minimize peak period traffic conflicts. The project sponsor and construction contractor(s) would meet with the Traffic Engineering Division of the Department of Parking and Traffic, the Fire Department, MUNI and the Department of Public Works to determine feasible traffic mitigation measures to reduce traffic congestion, including transit disruption (for example, potential relocation of bus stops), and pedestrian circulation impacts during construction of the project. In order to minimize traffic conflicts, the contractor would be required to use a flagperson on an as-needed basis to direct traffic during construction.</p>	<p>Less than significant.</p>

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
C8: There would be a temporary parking demand created by construction workers. This impact would be potentially significant, but would be mitigated to a less-than-significant level by Mitigation Measure C8.	C8: The contractor would make parking arrangements with an off-site parking facility in the area and, if necessary, the contractor would arrange to have the construction workers shuttled to the construction site.	Less than significant.
<p><u>Air Quality</u></p> <p>D1: Fugitive dust generated by construction and demolition activities would contribute to PM₁₀ concentrations that could violate State PM₁₀ standards. This impact could be potentially significant and intermittent, but would be mitigated to a less-than-significant level by Mitigation Measure D1.</p>	D1: The project sponsor would require the contractor to wet down the site during demolition and construction at least twice a day during construction to reduce particulate by at least 50 percent, would require covering soil, sand and other fine material, and would require street sweeping around the construction site at least once per day.	Less than significant.

TABLE S-1: SUMMARY OF IMPACTS AND MITIGATION MEASURES

ENVIRONMENTAL IMPACT	MITIGATION MEASURE	LEVEL OF SIGNIFICANCE AFTER MITIGATION
D2: The project would increase emissions of criteria pollutants from increased operation of stationary sources and increased vehicular traffic to and from the project site. The impacts would be less than significant.	None required.	Less than significant.
Noise E1: The ambient noise levels from existing and projected traffic adjacent to the project would exceed the standards for noise levels in classrooms at 135 Van Ness. This would be a significant impact that would be mitigated to a less-than-significant level by Mitigation Measure E1.	E1: To provide for an acceptable interior noise environment, the proposed project building would be mechanically ventilated to allow the windows to remain closed for noise control.	Less than significant.

purposes. However, it is the opinion of the District that under this alternative the SOTA program would have to be modified due to the physical space constraints inherent in retaining the Tharp building. The principal objective of Alternative C would also be the retention of the Tharp building and the preservation of its architectural integrity. However, unlike Alternative B, under Alternative C the SOTA would not be relocated to the project site. Rather, the on-site buildings would be used by District administrative staff. Excess office space could be leased to third parties.

ALTERNATIVE A: NO PROJECT

Under the No Project Alternative, none of the proposed changes would occur to buildings on the project site. The 170 Fell Street building would not be demolished or repaired. Nourse Auditorium and the 135 Van Ness Avenue building would not be renovated or seismically upgraded. Both the 170 Fell Street building and the Gymnasium Wing of the 135 Van Ness Avenue building would remain damaged, uninhabitable, vacant, and left in a state of disrepair. Federal Emergency Funds would not be utilized. SOTA would continue to occupy the surplus elementary school on Font Street, adjacent to San Francisco State University, while San Francisco Unified School District staff would continue to occupy 135 Van Ness Avenue.

If the No Project Alternative were implemented, none of the impacts associated with the proposed project would occur. In general, the environmental characteristics of the project site would remain as described in the Setting sections of this report. (See Chapter 4, Environmental Setting, Impacts and Mitigation Measures, for a discussion of the existing conditions.) Under this alternative, because the 170 Fell Street building would not be demolished, no significant impacts to historical architectural resources would occur. However, structural improvements needed to make the building habitable would not occur, and deterioration of the building would continue. The Gymnasium Wing of the 135 Van Ness Avenue building would also remain uninhabitable due to unrepairs structural damages. Construction impacts associated with the proposed project, including traffic, noise, and air quality impacts associated with demolition, excavation, and construction activities, would not occur under the No Project Alternative. Operational impacts, such as increased population and increased energy demand, would not occur with this alternative. Proposed landscaping improvements would also not be implemented.

ALTERNATIVE B: PRESERVATION AND ADAPTIVE REUSE OF 170 FELL STREET FOR SCHOOL USE

Variant 1: Preservation and Adaptive Reuse of 170 Fell Street for School Use

Under this variant of Alternative B, the proposed project site would be occupied by an as-yet unidentified SFUSD school, while SOTA would continue to operate at its current location on Font Street. The building at 170 Fell Street would be retained, it would be adaptively reused for school purposes, and its historic architectural integrity would be preserved. Nourse Auditorium and the 135 Van Ness Avenue building would also be adaptively reused for the same school use. All three buildings would be seismically and otherwise upgraded to current State standards for school buildings. As with the proposed project, under Variant 1 the SFUSD administrative staff currently occupying 135 Van Ness Avenue would be relocated.

Under Variant 1, seismic bracing that would be required for the 170 Fell Street building would block the small side units of the three-unit windows in one building facade. The large central units of these windows, along with the transoms over them, would remain free. Other key exterior architectural features of the historic building would be preserved under this variant. Internal features, including configuration of classrooms and corridors, would be reconstructed similar to the original building, particularly within identified "preservation" areas within the building.

The potential environmental impacts associated with Variant 1 would be the same as those of the proposed project, with one principal exception: the 170 Fell Street building would not be demolished, thereby eliminating the significant impact to an historic architectural resource that would occur under the proposed project. The increased student, faculty, and visitor population at the site that would be associated with implementation of Variant 1 would have a corresponding effect on traffic circulation and local area parking that would be similar to the proposed project, which is described in Section 3.C of this EIR. However, access to the building complex is inadequate for safe ingress and egress of emergency vehicles, due to the existing distances between the 170 Fell Street building and the South Wing of 135 Van Ness Avenue building. Handicapped access will have to be provided at the 170 Fell Street Building. These impacts could be mitigated with appropriate design features.

Variant 2: Preservation and Adaptive Reuse of 170 Fell Street for the SOTA Program Use, with the Conversion of the Library Wing and the Gymnasium Wing of the 135 Van Ness Avenue Building Similar to the Proposed Project

Under Variant 2 the 170 Fell Street building, a historic architectural resource, would be preserved and adaptively reused for SOTA program needs. As with the proposed project, the 135 Van Ness Avenue building and Nourse Auditorium would also be seismically upgraded and rehabilitated under this variant, and both buildings would be adaptively reused for the SOTA program. SFUSD staff in the 135 Van Ness Avenue building would be relocated. The interior spaces of 170 Fell Street would be reconfigured to accommodate the SOTA program while attempting to preserve to the maximum extent feasible the preservation zones. Due to the elevation differences of the first level of the existing 170 Fell Street building and Nourse Auditorium, a lift would be installed off the courtyard to provide handicapped access to the building. A lift would also be installed in the rear of the Black Box Theater to facilitate the moving of scenery and other items from the 170 Fell Street building. One bay of the south wing of the 135 Van Ness building would be removed in order to provide handicapped access and a new entrance to the campus. The area between the existing 170 Fell Street building and the Nourse Auditorium will be filled in to provide a loading space and linkage to the Nourse Auditorium.

The potential environmental impacts associated with Variant 2 would be similar to those of the proposed project, with one principal exception: the 170 Fell Street building would not be demolished, thereby eliminating the significant impact to an historic architectural resource that would occur under the proposed project. The increased student, faculty, and visitor population at the site that would be associated with implementation of Variant 2 would have a corresponding effect on traffic circulation and local area parking that would be similar to the proposed project, which is described in Section 3.C of this EIR.

Variant 3: Preservation and Adaptive Reuse of 170 Fell Street for the SOTA Program Use with the Uses of the Library and Gymnasium Different than the Proposed Project

As with Variants 1 and 2, Variant 3 would retain the 170 Fell Street building, a historical architectural resource, and adaptively reuse the building for SOTA program, as with Variant 2. The other buildings on the site would also be renovated and seismically upgraded and used by the SOTA program.

SFUSD staff currently occupying 135 Van Ness Avenue would be relocated. Variant 3 would differ from Variant 2 in that the visual art and performing art components of the SOTA program would be interspersed among the 170 Fell Street building and the north and south wings of the 135 Van Ness building. Similar to Variant 2, the interior spaces of 170 Fell Street would be reconfigured to meet the SOTA program need with less intrusive result to the existing fabric and interior spaces of the 170 Fell Street building; the Library Wing of the 135 Van Ness Avenue building would be decreased by one bay in order to provide sufficient room for a new entrance to the SOTA complex that would be handicapped accessible; and the area of the 170 Fell Street building and the Nourse Auditorium would be filled in.

The potential environmental impacts associated with Variant 2 would be similar to those of Variant 3 and the proposed project, with the exception of not demolishing the 170 Fell Street building that would occur under the proposed project. The increased student, faculty, and visitor population at the site traffic circulation and local area parking associated with implementation of Variant 3 would be similar to the proposed project, which is described in Section 3.C of this EIR.

ALTERNATIVE C: PRESERVATION AND ADAPTIVE REUSE OF 170 FELL STREET FOR NON-EDUCATIONAL USE

Under Alternative C, the 170 Fell Street building would be retained and an historic architectural resource would be preserved. The building would be adaptively reused for non-educational purposes. The SFUSD staff in the 135 Van Ness Avenue building would remain. The Nourse Auditorium would not be renovated or seismically upgraded to meet State requirements for school buildings. The 135 Van Ness and 170 Fell Street buildings would be upgraded and strengthened to meet current building code and seismic safety standards for conventional occupancy, while preserving the key historical architectural features. The buildings would be reused as office space by the SFUSD or another user. In the 170 Fell Street building, seismic strengthening work would block a number of windows on the south, east, and west elevations. Substantial portions of the existing interior construction and finishes would be removed to accommodate proposed seismic strengthening and office-related improvements. Selected interior spaces identified as the most historically significant, such as interior stairs and corridors, would be retained and reconstructed to match their original configurations and finishes. Handicap access ramps would be required to the

first level of the buildings.

The potential environmental impacts associated with Alternative C would be similar to those of the proposed project, with one principal exception: the 170 Fell Street building would not be demolished, thereby eliminating the significant impact to an historic architectural resource that would occur under the proposed project. While implementation of Alternative C would create an increase in on-site population, resulting in some of the effects on traffic circulation and local area parking that were described for the proposed project (see Section 3.C of this EIR), the population increase would be much lower than that associated with the proposed project, and consequent impacts on traffic and parking would be proportionally reduced.

3. PROJECT DESCRIPTION

A. PROJECT SPONSOR'S OBJECTIVES

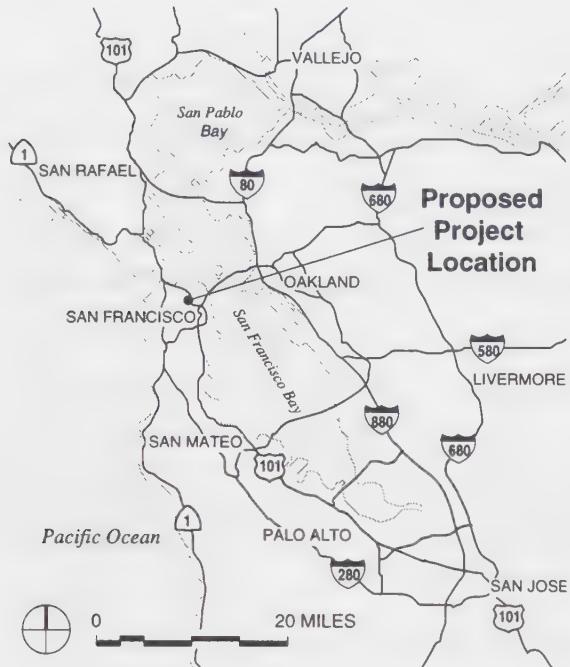
SFUSD proposes to expand the student capacity of SOTA, currently on Font Boulevard, by relocating it to the block that currently contains the School District Headquarters at 135 Van Ness Street. The SFUSD has the following objectives for the SOTA project:

- Design a school of excellence for the arts in the Bay Area
- Develop a state-of-the-art facility that will provide educational services in the arts for students of the SFUSD and Bay Area
- Provide a standard of arts services and education that can be utilized throughout the School District
- Provide a center for resource development to enhance the skill base for all teachers in the District, using the arts to integrate all academic areas
- Provide an arts center that will integrate arts education and performance with arts institutions, such as the Opera, Symphony, Ballet, galleries and small, diverse arts organizations.

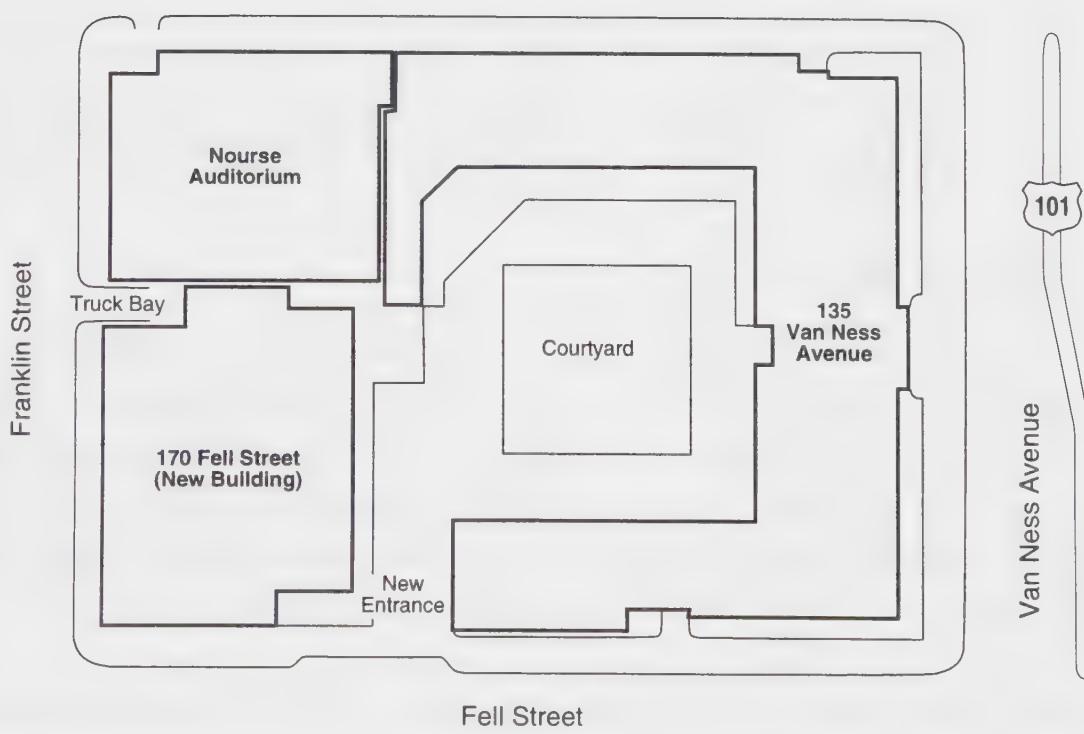
B. PROJECT LOCATION

The proposed project would be located on Lot 1 of Assessor's Block 815 in the City's Civic Center (Figure 1, page 3-2). The block is bounded by Van Ness Avenue, Hayes Street, Franklin Street and Fell Street, and contains three buildings: 135 Van Ness Avenue, The Nourse Auditorium, and 170 Fell Street. These three existing buildings form an interior court which is currently used for parking for approximately sixty automobiles. Vehicular access is from Franklin Street. The entire block is within the City designated Civic Center Historic District.

135 Van Ness Avenue Building fronts on Van Ness Avenue and extends the full length between Fell and Hayes Streets. The building was part of the old Commerce High School and is a U-shaped structure, constructed in 1926, with the one-story Library Wing



Hayes Street



Source: During Associates, after Gordon H Chong



SCHOOL OF THE ARTS PROJECT LOCATION

FIGURE 1

facing Fell Street and the two-story Gymnasium Wing facing Hayes Street. Presently occupied by the School District administrative staff, the building was designated as City Landmark No. 140 on December 6, 1981. The gymnasium was severely damaged during the Loma Prieta Earthquake in 1989, and has remained vacant.

170 Fell Street Building (the Newton J. Tharp Commercial School building) fronts on Fell and Franklin Streets. The approximately 67,000 square foot four-story, steel framed building contains an unreinforced brick facade and hollow clay tile interior partitions. The building was originally built in 1910 as a school in the middle of the block on Grove Street between Larkin and Polk Streets, and was moved to its present site in 1913. It was condemned by the City Bureau of Building Inspection after the 1989 earthquake and has since remained vacant.

The Nourse Auditorium has frontage on Hayes and Franklin Streets and is connected to the gymnasium of the 135 Van Ness Building. It can be accessed from Hayes Street and the interior courtyard. It is presently used for opera rehearsal and other productions, and is available for rent by private organizations. The auditorium has about a 1,900 seat capacity and was formerly used for meetings of the SFUSD Board. The entire Franklin Street facade of the Nourse Auditorium building was painted in 1989 by Keith Sklar with a mural entitled "Learning Wall."

C. PROJECT CHARACTERISTICS

The proposed new SOTA would entail the adaptive reuse of the 135 Van Ness Avenue and the Nourse Auditorium, the demolition of the existing 170 Fell Street Building and the construction of a new structure of similar size (Figures 2, 3, 4, 5, and 6 pages 3-4 to 3-8). The central courtyard would be redesigned to provide a landscaped gathering space for students. The main entrance to the complex would be from Fell Street between the new 170 Fell Street Building and the existing 135 Van Ness Avenue Building.

The current administrative staff of the SFUSD would be relocated into other SFUSD owned or leased space. The SOTA complex would have the following components (Figures 7 to 10, pages 3-10 to 3-13):

Fell St



3-4

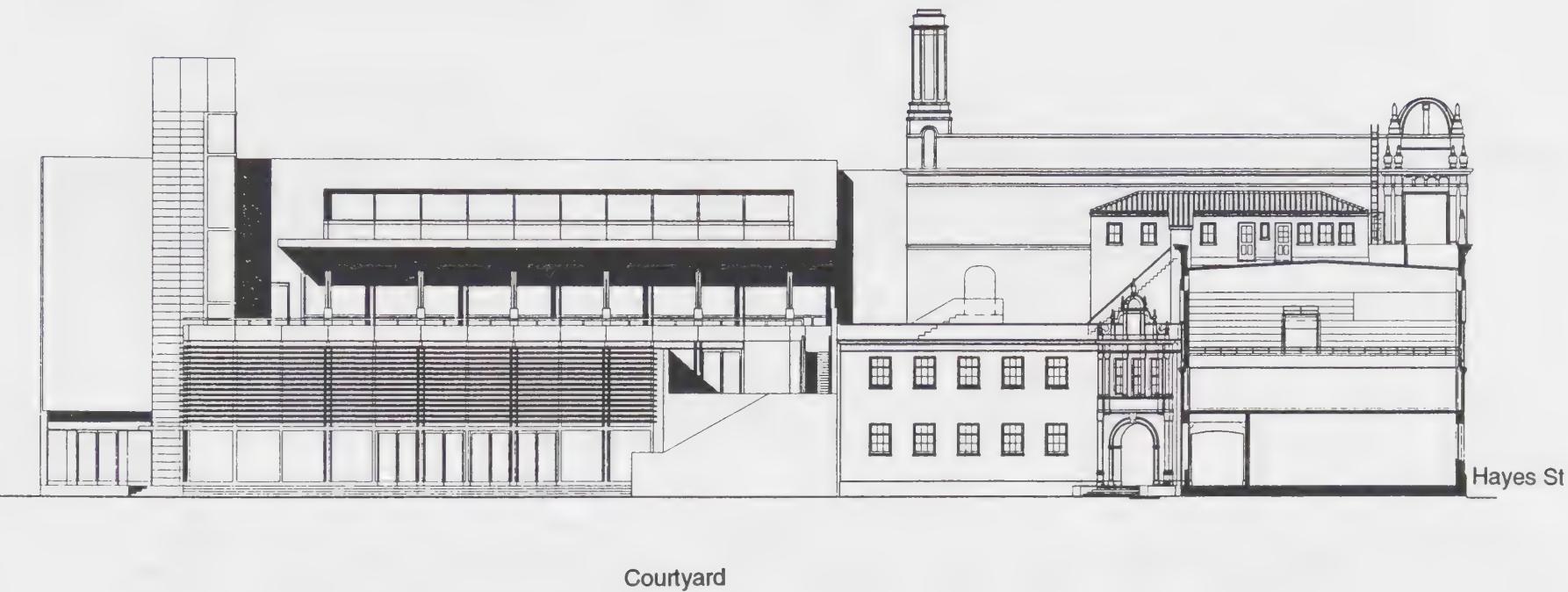
Source: Gordon H. Chong + Partners

135 VAN NESS AVENUE EAST ELEVATION FIGURE 2



Source: Gordon H. Chong + Partners

135 VAN NESS AVENUE SOUTH ELEVATION FIGURE 3



Source: Gordon H. Chong + Partners

170 FELL STREET EAST ELEVATION FIGURE 4



Source: Gordon H. Chong + Partners

170 FELL STREET WEST ELEVATION FIGURE 5



Source: Gordon H. Chong + Partners

170 FELL STREET SOUTH ELEVATION FIGURE 6

135 Van Ness Building: The entire building would be renovated, including the north and south wings, which would consist of seismic retrofit and other upgrades to bring this building into compliance with applicable State law governing construction of schools.

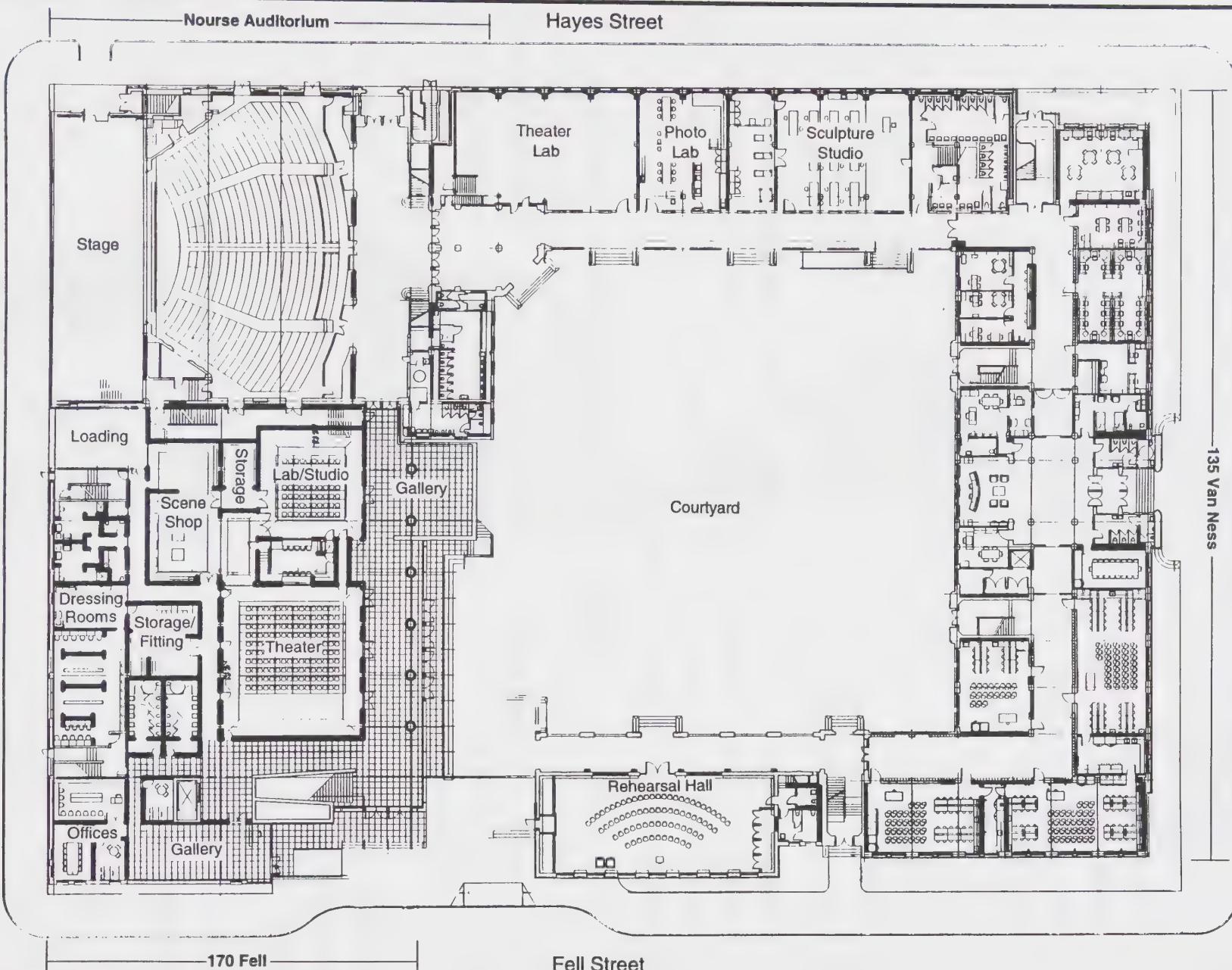
This building would be the main SOTA classroom building for the arts and academic classes: the first floor would have a reception area, the principal's office, administrative offices and meeting rooms, a library, computer laboratory, and classrooms for chemistry, biology, physics and earth sciences; the second floor would include classrooms for English and Foreign languages, an audio language laboratory, and faculty offices; the third floor would feature classrooms for mathematics, social studies, a seminar room, and faculty offices. The fourth floor penthouse would contain faculty offices. The South Wing would comprise a rehearsal hall and the North Wing (the old gymnasium) would be devoted to the visual arts.

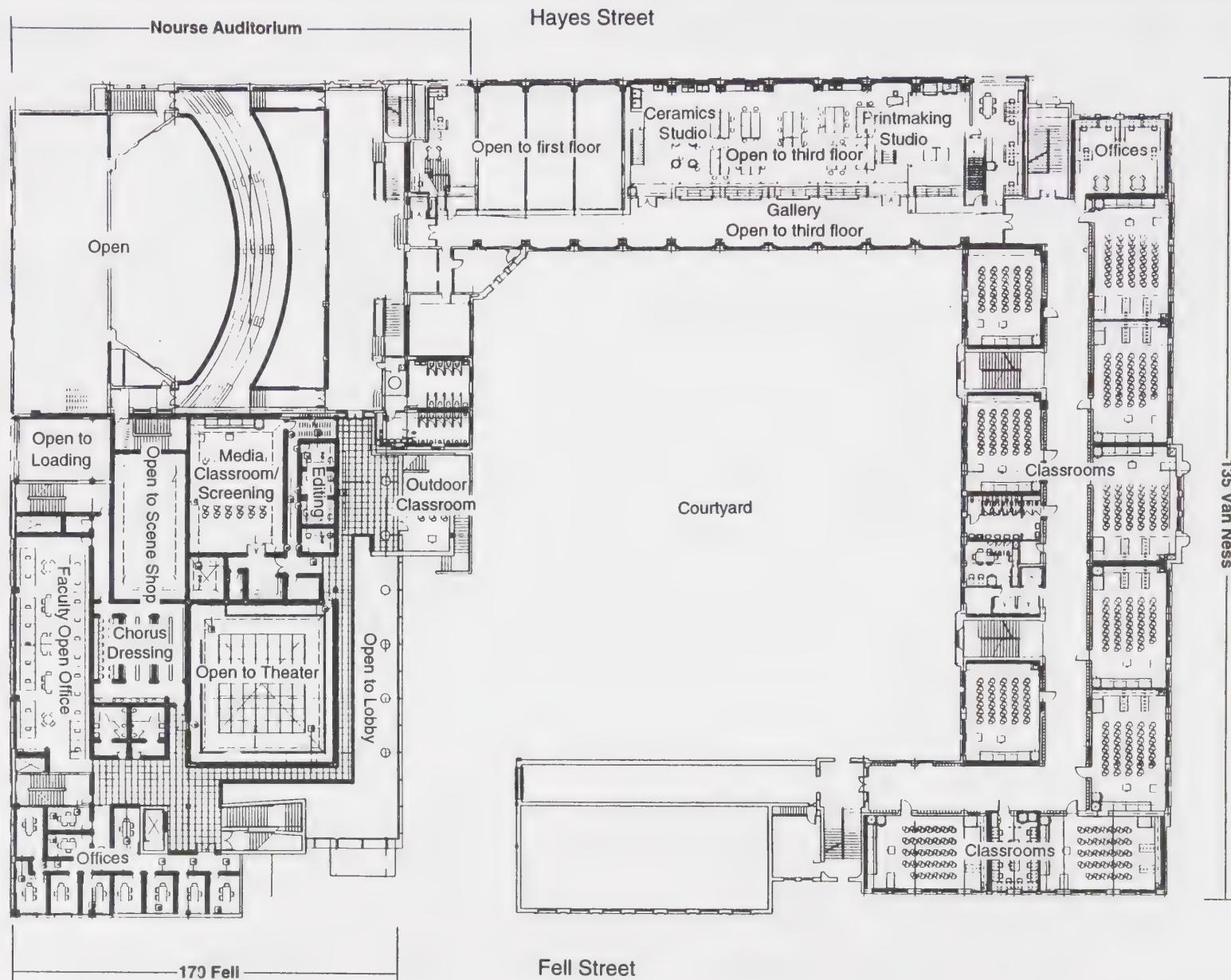
Nourse Auditorium The auditorium building would be seismically upgraded and renovated, including provision for disabled access. The Nourse Auditorium would be dedicated to arts presentations for the entire school district and for SOTA students to be educated in subjects related to Theater arts.

170 Fell Street The new building at 170 Fell Street would be similar in size, scale and height to the demolished 170 Fell Street Building. The new building would be devoted to studios and classrooms for the performing arts, and would provide supportive functions for the Nourse Auditorium. It would also serve as the Center for Arts Education for the training of all teachers in the school system and galleries.

No off-street parking is proposed for the project. When the project is completed in 1999, the new SOTA complex would provide an expanded capacity for up to a maximum of 1,000 students.

Gordon H. Chong + Partners of San Francisco is the project architect, assisted by Page & Turnbull for historic preservation, and Faye Bernstein & Associates for structure.

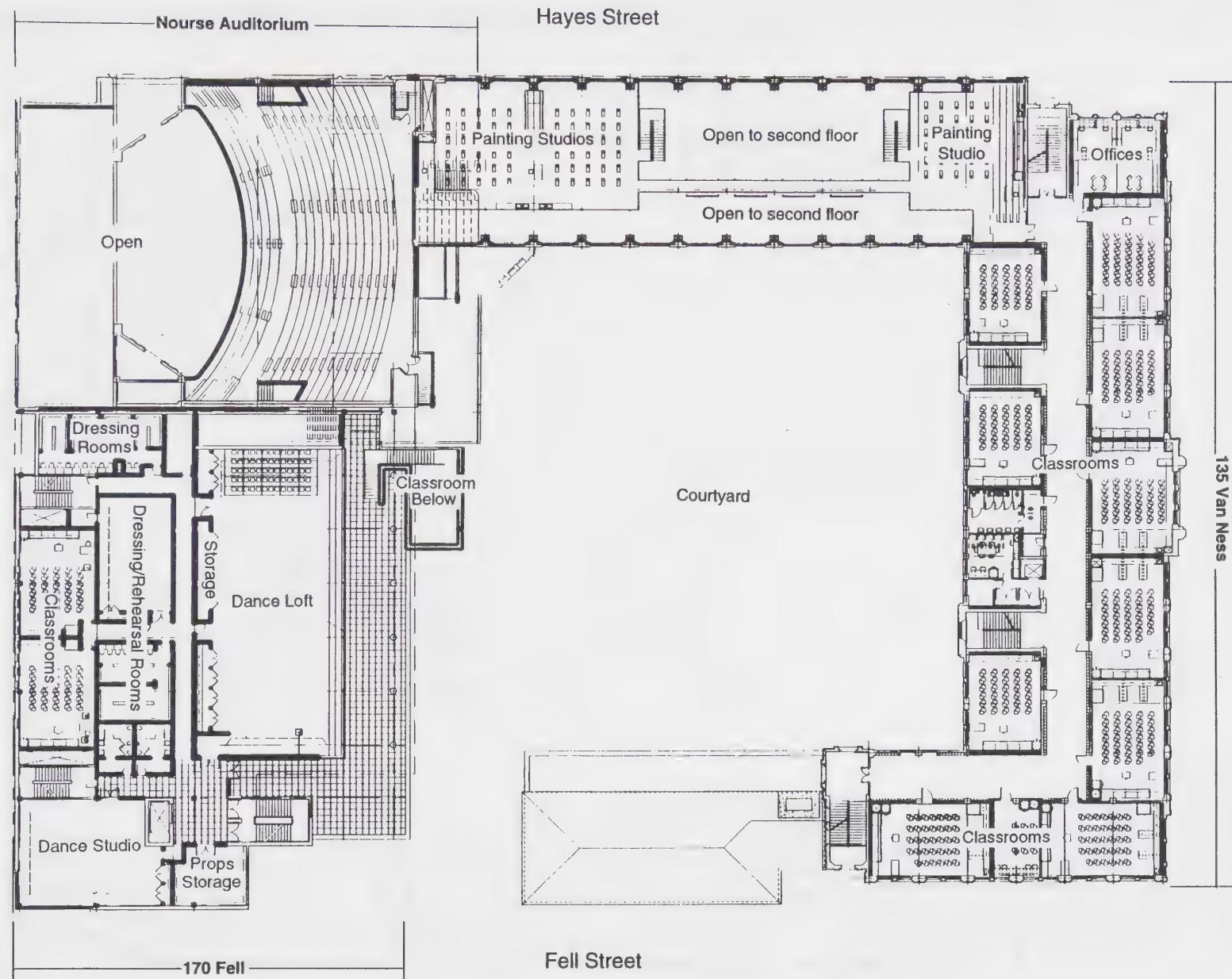


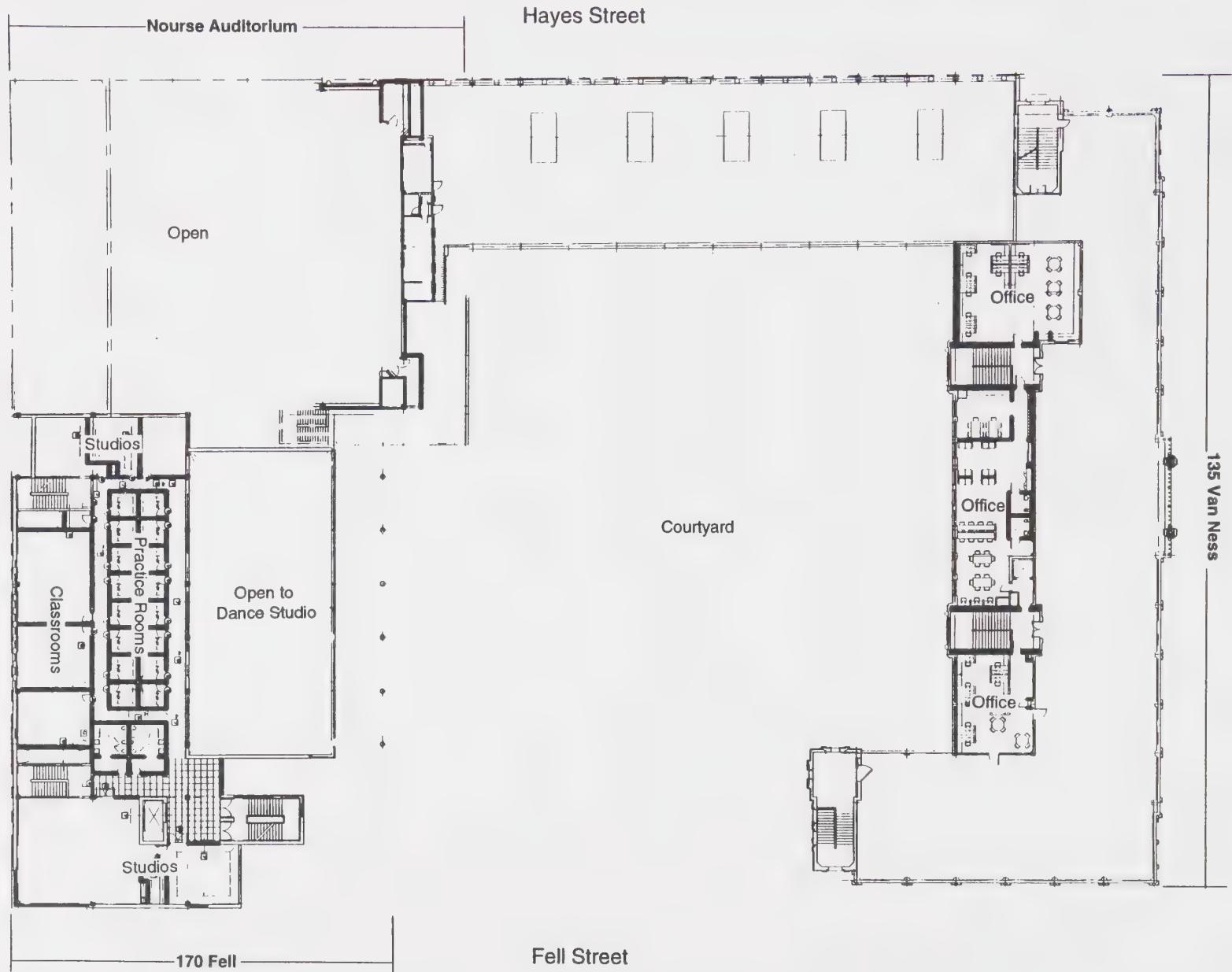


Source: Gordon H. Chong + Partners

PROJECT SECOND LEVEL FLOOR PLAN

FIGURE 8





School Of The Arts

SOTA was established in 1981 and was located at McAteer High School for ten years. In 1991, SOTA became a separate high school. SOTA is a magnet school, which serves the entire Bay Area. Currently, SOTA is housed in an old surplus elementary school on Font Street adjacent to San Francisco State University. SOTA currently has approximately 400 students, who are selected through an audition process, and about 57 full-time and part-time faculty. An academic high school, over 90 percent of the graduating SOTA students proceed to college or universities. The school year generally runs from September to June. Classes begin at 8:00 a.m. and end at 3:00 or 4:00 p.m., depending on the particular class. Morning classes are devoted to the academic and the afternoon classes focus on the arts. The six major art disciplines are Band, Orchestra, Choir/Piano, Dance, Drama, and Visual Arts. Two minor disciplines are Media and Theater Techniques (lighting, set design, sound, etc.).

The new SOTA campus would also serve as a resource for the arts for the entire school district to enhance the arts skills of the district teachers. In addition to individual artists, institutions such as the San Francisco Symphony, would be offered teaching positions at SOTA. SOTA students would participate in community services and serve as resources to other district schools.

D. PROJECT SCHEDULE, COST, APPROVAL REQUIREMENTS, AND GENERAL PLAN POLICIES

PROJECT SCHEDULE

The proposed project would begin demolition and construction in 1998. The 135 Van Ness renovation would be completed in late 2000. The replacement 170 Fell Street building would be completed in fall of 2000. The SOTA would relocate and begin classes in the 2000-2001 academic year.

COST

The proposed project is expected to cost about \$46 million (1997 dollars). The renovation of 135 Van Ness including the north and south wings and the Nourse Auditorium would cost about \$28.3 million, the demolition and replacement of 170 Fell Street would cost approximately \$17.7

million. \$14 million would be part of a Federal Emergency Management Agency grant, and the balance would be provided from state and local School Bond funds approved by the voters.

APPROVAL REQUIREMENTS

Following a public hearing before the SFUSD Board on the Draft EIR, responses to written and oral comments will be prepared. The EIR will be revised as appropriate. A Final EIR, consisting of the Draft EIR with revisions and the responses to comments, will be presented to the School Board for certification as to its accuracy, objectivity, and completeness. No permits may be issued or approvals granted before the Final EIR is certified.

The proposed SOTA project is under the jurisdiction of the SFUSD, a State agency. The SFUSD adopted Resolution Number 59-12W3 on August 30, 1995, exempting the project from the jurisdiction of the City and County of San Francisco. Therefore, it is not required to comply with the *General Plan* or *Planning Code* of the City. Under Section 1010 of the *City Planning Code*, the City Planning Commission advises other public agencies, such as the SFUSD, on projects which would otherwise fall under the provisions of Article 10 of the *City Planning Code*. The project construction must comply with applicable State law governing construction of schools. The adaptive reuse of 135 Van Ness, a Landmark building, would be undertaken, to the maximum extent feasible, in compliance with *Secretary of the Interior's Standards for the Treatment of Historic Properties*, 1992 (the Secretary's Standards).

The State Department of Education, and the Division of the State Architect, Department of Social Services, Office of Regulation Services has the ultimate approval authority over the plans for the project.

The current proposed project would not obviously or substantially conflict with any adopted environmental plan or policy. Environmental plans and policies are those, like the Bay Area Air Quality Plan, which directly address physical environmental issues and/or contain targets or standards which must be met in order to preserve or improve characteristics of the City's physical environment.

Part of the funding for the proposed project would come from the U.S. Federal Emergency Management Agency (FEMA); therefore, the project also needs to undergo federal environmental review as required by the National Environmental Quality Act (NEPA). This additional environmental review includes Section 106 review pursuant to the National Historic Preservation Act of 1966. A finding of adverse effect would require the execution of a formal Memorandum of Agreement (MOA) between the SFUSD, as the project sponsor, the Certified Local Government (CLG), the State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP). The MOA would set forth stipulations designed to mitigate the adverse effects of the project's implementation on historic resources.

4. ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

On the basis of an Initial Study published on May 31, 1996, the SFUSD determined that an Environmental Impact Report (EIR) was required. The Initial Study determined that issues related to land use, urban design, glare, population and housing, construction air quality, wind, utilities and public services, biology, hydrology, water quality, geology and topography, energy and natural resources, hazards, construction noise, and cultural resources (archaeology) required no further discussion. Therefore, the EIR does not discuss these issues. (See Chapter 9, Appendix A, pages A.1 to A.22, for the Initial Study).

This chapter describes the existing setting, discusses the environmental impacts of the project, describes cumulative impacts through year 2010, and identifies mitigation measures for the environmental impacts examined in this Draft EIR. A discussion of Land Use and Zoning is included for informational purposes and to provide contextual discussion of the project's impacts. Not all of the impacts presented in this chapter are physical environmental effects as defined by the California Environmental Quality Act (CEQA). Nonphysical effects are included here for informational purposes only.

Within each impact section, potential impacts are identified in bold type. Following the discussion of each stated impact, feasible measures that could avoid, alleviate or lessen the severity of identified impacts are identified. If mitigation measures could in themselves generate significant impacts, these impacts are also identified. Where mitigation measures are proposed as part of the project, they are assumed for purposes of analysis to be included in the project description, unless otherwise indicated.

A. LAND USE AND ZONING

SETTING

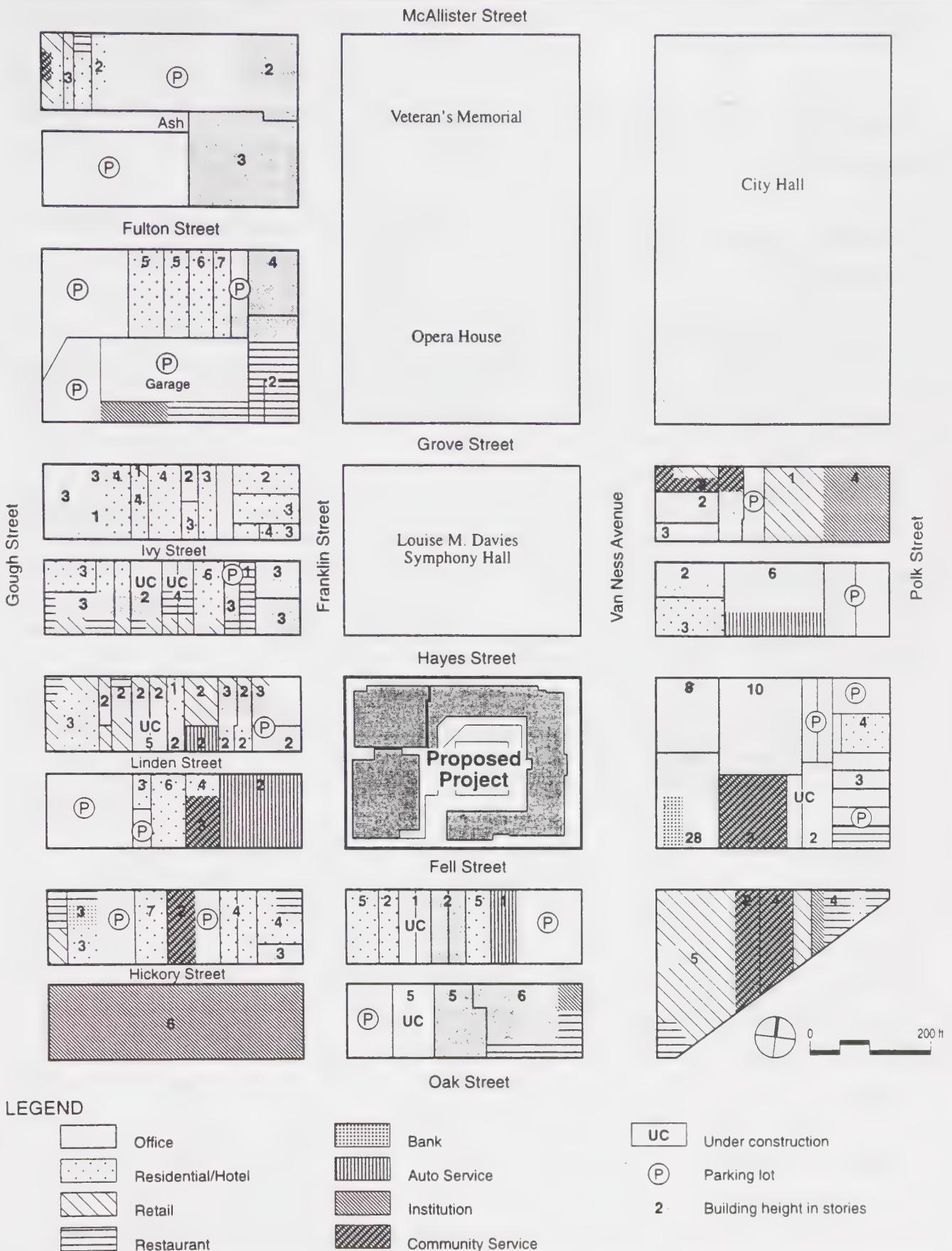
Land Use

The project site is the block bounded by Van Ness Avenue, Hayes Street, Fell Street, and Franklin Avenue (see Figure 1, page 3-2). The site currently contains three buildings: 135 Van Ness Avenue, 170 Fell Street, and the Nourse Auditorium. These buildings encompass the entire perimeter of the block, forming an interior courtyard which is currently used for parking approximately 60 automobiles with access via Franklin Street.

The project site is located at the southwest edge of the City's Civic Center complex and at the eastern edge of the neighborhood known as Hayes Valley. The Civic Center complex functions as a center for governmental and cultural activity. Civic Center Plaza, located one block north of the project site, forms the center of this complex.

Civic Center Plaza is surrounded by several prominent public buildings, including: City Hall (currently undergoing seismic retrofit and remodeling); the New Main Library; the former Library building (proposed for reuse as the Asian Art Museum); the Bill Graham Civic Auditorium and Brooks Hall; and the State Building at 455 Golden Gate Avenue (which was demolished and replaced by a new State Building of approximately 800,000 sq.ft.). Other public buildings in the Civic Center area include the War Memorial Building (temporarily occupied by the Mayor's office, the Board of Supervisors, and other City offices), the Opera House (which was seismically retrofitted recently), Davies Symphony Hall, and State and Federal office buildings. Adjacent to these public uses are a mix of private offices, retail and restaurant uses, and residential hotels and apartments (Figure 11, page 4-3).

Several of the public buildings in the Civic Center area are currently undergoing some form of seismic strengthening or reconstruction. In addition to the City Hall and State Building projects previously mentioned, a new 240,000-sq.ft. building for the Superior and Municipal Courts of the City and County of San Francisco is near completion in the southern half of the block bounded by Polk, McAllister and Redwood Streets and Van Ness Avenue, previously occupied by City



LAND USES IN THE PROJECT VICINITY FIGURE 11

offices and a parking lot; reconstruction of the Federal Building open space plaza; and a federal office building proposed at 10th and Market Streets.

Land uses immediately surrounding the project site are similar to those found in the greater Civic Center area:

- On the south side of Fell Street between Van Ness Avenue and Franklin Street are (from east to west) a 50-space surface parking lot, the Speedometer Service & Instrument Co., Inc. automotive center, the six-story Opera Apartments, a two-story building containing the Cine Rent West/Edit Center screening room, a two-story building containing Bruce's Automotive, a two-story vacant commercial building, the two-story residential Oak Hotel, and a five-story, 38-unit apartment building.
- On the west side of Franklin Street between Fell and Hayes Streets uses include (from north to south) a 36-space surface parking lot, the two-story M.J. King Professional Building (which houses Tour Arts and Ton's Answering Service), the eastern terminus of Linden Street (a one-way, eastbound local street), and the one-story U & I Automotive Center.
- On the north side of Hayes Street between Van Ness Avenue and Franklin Street are the musicians' and service entrances to Davis Symphony Hall.
- On the east side of Van Ness Avenue between Fell and Hayes Streets uses include 100 Van Ness Avenue (a 28-story commercial office building with ground-floor retail) and 150 Van Ness Avenue [the eight-story commercial office building occupied by the American Automobile Association (AAA)].

Zoning

The *City Planning Code*, which incorporates by reference the City Zoning Maps, governs permitted uses, densities and configuration of buildings within San Francisco does not apply to this site. The *City Planning Code* provisions, however, are utilized in evaluating the proposed project. The project site is located in a P (Public) Use District, which includes land that is owned by a governmental agency and is in some form of public use. Permitted uses under the *City Planning Code* (Section 234.1) include structures and uses of governmental agencies not subject to the *Code*, public structures and uses of the City which are in conformity with the *San Francisco General Plan*. Certain other uses enumerated in Section 234.2 are permitted with Conditional Use authorizations. The proposed project would be a principal permitted use under the *City Planning Code*. The project site is located in the 160-H Height and Bulk District, which allows for buildings up to 160 feet in height, with maximum plan dimensions of 170 in length and

200 feet diagonal dimension above 100 feet. There is no floor area ratio (FAR) limit in a P District.

Permits to construct new buildings or to alter or demolish existing ones generally may not be issued unless the proposed project conforms to the Code or an exception is granted pursuant to provisions of the Code. City-owned buildings are subject to the Code requirements either expressly or implicitly. The project site, however, is under the jurisdiction of the SFUSD, a state agency which is exempted from the requirements of the Code and the *San Francisco General Plan*.¹ The proposed project would comply with the height, bulk and use limitation provisions of the *Planning Code*.

IMPACTS AND MITIGATION MEASURES

According to Appendix G of the CEQA Guidelines, the following thresholds of significance are relevant in determining whether a project would result in significant land use impacts:

- if the project would disrupt or divide the physical arrangement of an established community, and
- if the project would conflict with adopted environmental plans and goals.

Land Use

Impact A1: The proposed project would relocate the School of the Arts to the 135 Van Ness Avenue complex and would revert the present office use to educational/institutional. This would be a less than significant impact.

The School of the Arts project would return the old High School of Commerce complex to its original use as an institution for secondary education. Although used for offices, the SFUSD has never adopted a resolution declaring this site as surplus or de-designated this site for school use.

The current SFUSD administrative offices would be relocated elsewhere in the City and the SOTA would be expanded from its current enrollment of under 400 to a maximum student body capacity of about 1,000 students, faculty and staff.

The rehabilitation of the 135 Van Ness Avenue building and Nourse Auditorium and the replacement of the 170 Fell Street building would bring these buildings to the applicable provisions of the San Francisco Fire Code and the Field Act for public schools. The proposed use, therefore, is permitted and a reversion to the original use of the site. The proposed project would be generally compatible with many of the existing uses in the Civic Center area, particularly the performing arts, such as the San Francisco Ballet School, the San Francisco Opera, and the San Francisco Symphony, and other cultural resources, such as the proposed Asian Arts Museum and the San Francisco Main Library. Therefore, the project would not disrupt or divide the physical arrangement of a community; rather, the project would strengthen and further enhance the performing arts center of the City. The proposed project would not conflict with any adopted environmental goals and policies.

Mitigation Measure A1: None required.

Surrounding Land Uses

Impact A2: The proposed project would intensify the uses at the project site. The proposed land use intensification, in and of itself, would be a less than significant impact.

The physical effects associated with land use changes at the site, such as traffic, noise and historic architectural resources are analyzed in corresponding sections of the EIR.

This intensification of existing land uses on the project site would not result in a significant land use compatibility impact.

Mitigation Measure A2: None required.

B. ARCHITECTURAL AND HISTORIC RESOURCES

SETTING

Architectural Surveys

The San Francisco Department of City Planning (DCP) conducted a citywide inventory of architecturally significant buildings in 1976, which awarded approximately 10 percent of the City's

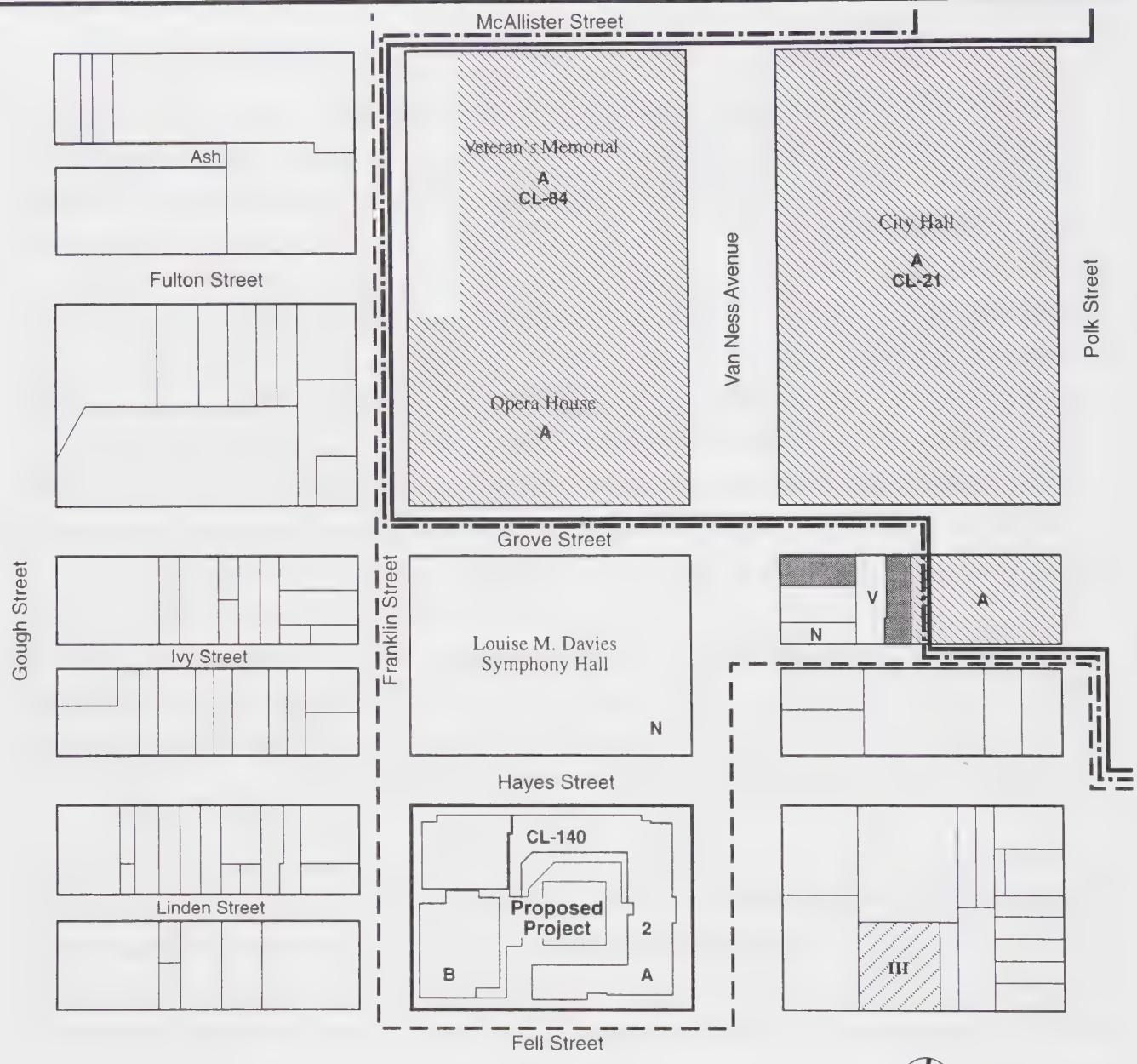
entire stock of buildings a rating for architectural merit ranging from a low of "0" to a high of "5." The buildings that were rated from 3 to 5 represent less than 2 percent of the City's entire building stock. Chapter 9, Appendix B, pages B-1 and B-2, details the rating system used by the 1976 DCP inventory.

The Junior League of San Francisco completed a survey of historically and architecturally significant structures in San Francisco, Marin, and San Mateo counties in 1968. The Junior League survey did not rate individual buildings. Rather, it described historic structures based on evaluation criteria including the structure's age, its association with an historic event or famous person, and whether it was a representative example of a particular style and/or the work of an important architect or builder. The results of the Junior League study are published in the book *Here Today*, recognized by the City as an official inventory of historic structures.

The Foundation for San Francisco's Architectural Heritage inventory, as described in the book *Splendid Survivors*, includes buildings within the primary and secondary survey areas of Civic Center and assigns ratings to buildings within the primary survey area. The project site is within the secondary survey area of this architectural inventory.

Figure 12, page 4-8, identifies buildings in the project vicinity that are either listed on the National Register of Historic Places, or listed as National Historic Landmarks, or designated as a City Landmark, or listed in the 1976 DCP Architectural Inventory. Figure 12 also delineates the boundaries of the local Civic Center Historic District, Federal National Register Historic District, and the National Historic Landmark Districts.

Buildings in the project vicinity that are listed on the National Register of Historic Places, listed as National Landmarks, designated as City Landmarks, rated by Heritage, and/or rated by the 1976 DCP Inventory include the former High School of Commerce Building at 135 Van Ness Avenue on the project site (City Landmark No.140, DCP "2" rating, Heritage "A" rating, and contributory building to the Civic Center Historic District); the Newton Tharp Commercial High School Building at 170 Fell Street on the project site (Heritage "B" rating, contributory building to the Civic Center Historic District); The Opera House and the Veterans War Memorial Building (City Landmark No.84, Heritage "A" rating, contributory building to the Civic Center Historic



LEGEND

Building Designations

1-5 DCP Rating (1976, Citywide)

I-IV Downtown Plan (1984, C-3 districts only)

A-C Heritage Rating (non C-3 districts only; from unpublished data)

CL-21 City landmark

Civic Center Historic District

— - - District Boundary

□ Contributory

■ Contributory/Altered

N Noncontributory

V Vacant lot

National Register of Historic

— - - Historic District Boundary

— National Historic Landmark District

□ Contributor to listed district

□ Contributor to eligible (unlisted) district or eligible for separate listing



Source: San Francisco Department of City Planning; Downtown Plan; *Splendid Survivors*; Foundation for San Francisco's Architectural Heritage; State Office of Historic Preservation; Environmental Science Associates; During Associates

ARCHITECTURAL RESOURCES IN THE PROJECT VICINITY

FIGURE 12

District); the City Hall (City Landmark No.21, Heritage "A" rating, contributory building to the Civic Center Historic District); and the Department of Public Health Building at 101 Grove Street (contributory building to the Civic Center Historic District),

Project Area²

The project site is located adjacent to the City's Civic Center district, two blocks south and one block west of City Hall. The Civic Center, in addition to its role as the seat of City governance and services, is a designated National Historic Landmark District (NHL). This is the highest designation possible for an historic property in the United States. The project site is outside the NHL.

In addition to its stature as a designated NHL, the Civic Center was recently designated as a local historic district (referred to as the San Francisco Civic Center Historic District). Whereas the NHL does not include the project site, the City designation does include it within the boundaries of the City's Civic Center Historic District, and lists the two buildings on the project site, 170 Fell Street and 135 Van Ness Avenue, as contributory buildings to that district.

Van Ness Avenue, a two-way, multi-laned road with a continuous landscaped median, is a principal street and serves as a primary north-south corridor for the City; the full length of Van Ness Avenue from South Van Ness to Lombard Street is also California Interstate Highway 101. The City has recognized the prominence of Van Ness Avenue by preparing the Van Ness Avenue Plan, which calls for the development of specific uses and an integrated streetscape, along with the preservation of identified historic buildings along its route. While this specific plan addresses the streetscape of the project site on Van Ness Avenue, the major focus of the plan is on that portion of Van Ness Avenue from north of the Civic Center to Lombard Street.

Project Site

The project site consists of a complex of three buildings at the perimeter of the block, enclosing an interior courtyard, currently used as a parking lot (Figure 13, page 4-11). The complex has had two separate uses: from 1914 through 1952 as a school; and since 1953 as an administrative office complex. The property consists of three principal buildings: 170 Fell Street,

the former Newton J. Tharp Commercial High School, constructed in 1910 and moved to its present location at the corner of Fell and Franklin Streets in 1913 (Figure 14, page 4-12); 135 Van Ness Avenue, a building composed of three wings added to the original Commercial High School; and the Nourse Auditorium which opened in 1926 (Figures 15 and 16, pages 4-13 and 4-14). Together, these buildings served as the High School of Commerce until 1952, and have since been converted to administrative office space for the school district.

In addition to its inclusion within the City-designated Civic Center Historic District, this property has also been designated as a City landmark (Historic Landmark No. 140, High School of Commerce). Though the landmark designation indicates the address as 135 Van Ness, the historic landmark designation is inclusive of the entire site, including both the 170 Fell and 135 Van Ness buildings and the courtyard/parking lot within (Figure 17, page 4-15).

Organized around an interior court, each building has its own distinctive massing, heights and fenestration. While the 135 Van Ness building, the North and South wings and the Nourse Auditorium form a unified ensemble, the 170 Fell Street building was not integrated into the overall design of the complex. Primary entry to the school complex is from the entry portal of the 135 Van Ness academic wing at the center of the Van Ness Avenue facade. Secondary entries are located between the Academic and Library wings on Fell Street, and between the Library wing and 170 Fell. Although it was the original building to the complex, the main entrance to 170 Fell Street has, ever since the opening of 135 Van Ness, become a secondary entrance with a concrete ramp structure added in recent years.

170 Fell Street is a monolithic, masonry clad building and is three stories over a partially above grade basement floor. Fenestrated on all four sides – as it was originally designed for and constructed at the center of an open site - it stands without visual or architectural connections to the adjoining wings of 135 Van Ness Avenue and the Nourse Auditorium.

The 135 Van Ness Avenue Building includes a single-story south wing (the Library) along Fell Street just east of 170 Fell; a three-story Academic wing along the full length of the Van Ness Avenue frontage and a two-story north wing (Gymnasium) on the central portion of the Hayes Street frontage. The Nourse Auditorium infills the corner of the site at Hayes and Franklin.



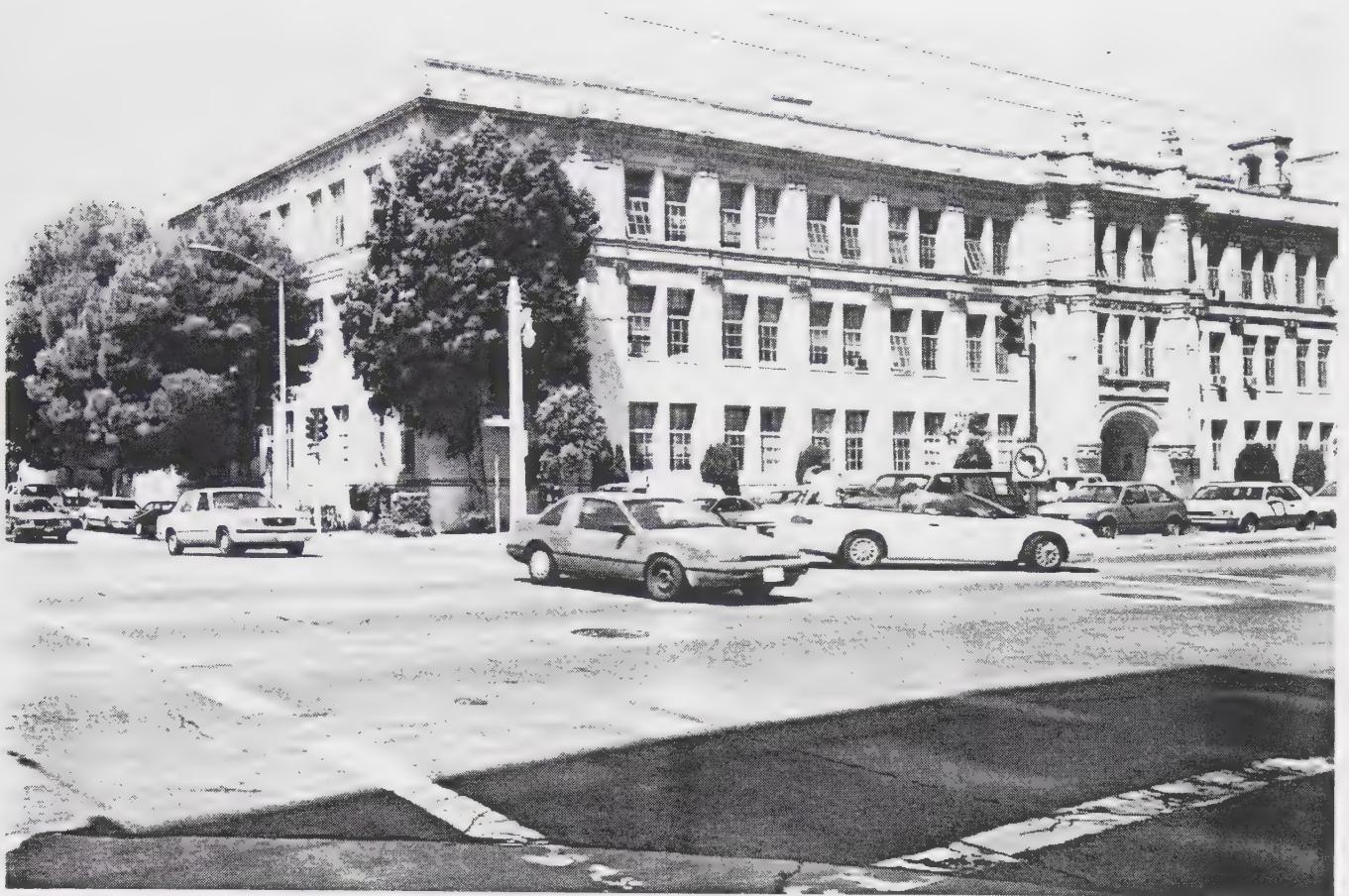
Source: Square One Productions

**PROJECT AREA PHOTOGRAPH: FIGURE 13
PROJECT SITE FROM THE ROOF OF 25 VAN NESS AVENUE LOOKING NORTH**



Source: Square One Productions

**PROJECT AREA PHOTOGRAPH: FIGURE 14
FELL AND FRANKLIN STREETS LOOKING NORTH**



Source: Square One Productions

**PROJECT AREA PHOTOGRAPH: FIGURE 15
VAN NESS AND FELL STREET LOOKING WEST**



Source: Square One Productions

**PROJECT AREA PHOTOGRAPH: FIGURE 16
HAYES AND FRANKLIN STREETS LOOKING SOUTH**



Source: Square One Productions

**PROJECT AREA PHOTOGRAPH: FROM THE 135 VAN NESS AVENUE BUILDING
LOOKING WEST ACROSS INTERIOR COURTYARD**

FIGURE 17

A central, open concrete and asphalt paved courtyard, originally a recreation yard with tennis courts, is enclosed by the buildings. Currently utilized as a parking lot, the space retains many of the original paving units, including borders of diagonal paving squares, some with inlaid bronze class commemoration plaques.

Each of the buildings and building wings are accessible from the courtyard. The arcades along the south and north wings of 135 Van Ness building and an entry loggia graced with a prominent, ornamented entry portal frames the interior courts in the style of a partially cloistered space to the Auditorium. Each of the other entries to the 135 Van Ness Avenue Building from the interior court is given prominence by ornamental, terra cotta clad entry portals. This interior court is connected to the exterior by a narrow, paved alley entering from Franklin, between 170 Fell Street and the Nourse Auditorium. Another narrow, covered entrance is located between the aforementioned 135 Van Ness Library wing and 170 Fell.

Since the Loma Prieta earthquake of 1989, the old High School of Commerce has seen reduced usage due to the closure of 170 Fell Street and the Gymnasium wing of 135 Van Ness, both of which were severely damaged and red tagged.

170 Fell Street

The 170 Fell Street building was originally designed for and constructed on a site fronting on Grove Street between Polk and Larkin Streets. Completed in 1910, the school building existed on that site for just three years. Thereafter, it was displaced by the construction of the new Civic Center; it was moved, reconstructed and reopened at the present location, 170 Fell Street.

This building is a three-story structure with a partial basement floor above ground, fronting on and oriented towards Fell Street, measuring 142 feet wide by 122 feet deep and 55 feet high from grade to top of parapet. Neo-classical in design, it is a steel-frame building with unreinforced brick masonry exterior walls, exterior terra cotta ornamentation, concrete floor slabs, and wood frame attic and roof structure. Interior walls are all plastered hollow clay tile.

The front (south) elevation is composed of bays of windows closely spaced along the entire elevation, with a recessed entry way at the bottom center. Side (east and west) elevations repeat

the pattern of window bays for two-thirds their length, ending with solid brick walls with a limited amount of ornamentation. The rear (north) elevation also has solid brick walls about one-quarter the overall length at either end; the central portion has a set of five closely spaced window bays, reflecting the largest of the interior volumes – an auditorium. Single width window bays are separated slightly from this central volume, with minor, pedimented entry portals and doors located at grade.

The original building design included a short, rusticated terra cotta clad base, reflecting that portion of the basement floor height above grade from the upper stories. This base course was replaced with brick when the building was reconstructed at its current location. Other ornamental elements include a continuous, shallow, terra cotta belt course separating the first and second floors, and a deeply projecting, classically ornamented terra cotta frieze and cornice, with a brick and terra cotta parapet above.

Spacious interior corridors surround a small, central light court, with adjoining elevator and toilet rooms composing the building core. Four interior staircases link the side and rear entries (one at each side and two at the rear) to the corridors. Traditional classrooms were planned around the perimeter of three sides, taking full advantage of light from the enormous windows, and separated from the corridors by coat rooms and classroom vestibules. At the rear of the building, the original school auditorium is located at the top (third) floor, with an open office space positioned below at the second floor, and a large, open office space (originally the school gymnasium) directly below on the first floor. The basement, being partially above grade has partial height windows, and contains large open spaces at the front of the floor; separate women's and men's lunch and recreation rooms along the side elevations, and mechanical spaces below the gymnasium.

Direct effects of the 1989 Loma Prieta earthquake include: closure and consequent neglect of the building; approximately half of the original brick and terra cotta parapet were damaged and removed to eliminate hazard; damage to the brick and terra cotta masonry is concentrated at the building corners and to interior hollow clay tile and plaster partitions.

135 Van Ness Avenue

The former High School of Commerce at 135 Van Ness Avenue, designed and built from 1923 to 1926 in the Spanish colonial revival style, is composed of three separate building wings and the Nourse Auditorium. Each wing has a different height, massing and architectural detail in correspondence to their differing original uses. The floor plan of this building denotes a shift to the more open educational style and the architectural and educational concepts associated with California schools of the 1920s and 1930s. The four-story Academic wing, located on Van Ness Avenue, housed administrative offices, classrooms, laboratories and shops in a double-loaded corridor plan, with all interior spaces generously proportioned yet simply detailed. As expected, the Main Lobby was of the highest relative quality.

The two-story Gymnasium wing is located mid-block on Hayes Street between the Academic wing and the Nourse Auditorium. The Gymnasium on the Second Floor contained a large volumed space of generous proportions yet simple, utilitarian design, and is illuminated by arched windows both north and south. Upper balconies exist at the east and west end of the space. The first floor of this wing housed gym support spaces, such as locker rooms, with an outdoor, arcaded passage way separating the interior from the central yard.

A distinctive, original quality of both the Academic and Gymnasium wings was their rooftops, each of which was planned and used for outdoor activities, specifically athletics.

Sited mid-block along Fell Street, the Library or south wing is a rectangular building housing only the Library and several small offices. The spacious Library fills the building's two-story volume, with a ceiling bordered by ornamented plaster, and wood casework at all the perimeter walls. Two levels of office spaces are discretely located at the building's eastern end. A secondary entry and stairway link the Library and Academic wings.

The Nourse Auditorium occupies the corner of Franklin and Hayes Street of the site. It is a relatively massive building, reflecting the tall and broad volume of the Auditorium space within. This is the space of the greatest architectural interest within the entire school complex. Entered from the interior courtyard through a formal entry portal and loggia, a wide and relatively shallow First Floor Lobby serves the Auditorium level, with broad stairs at each end leading to a Second

Floor Lobby of the Balcony level above. The original Men's and Women's Toilet Rooms are grouped outside the Lobby with entrances from the Loggia.

The Auditorium itself is gracefully scaled and richly ornamented with decorative plaster walls and ceiling; ornamental chandeliers providing light. The space is shallow and wide, with an overhanging balcony, and two organ chamber screens facing the audience from each side of the proscenium.

Altogether, the 135 Van Ness Building and the Nourse Auditorium are integrated by the application of a singular design style and the use of common exterior finish materials. Stucco and terra cotta ornamentation form elaborate entry portals, clad the upper stories and parapets of the buildings, and crown several stair towers that project above the roofscape. The building structures are of reinforced concrete, with the exception of the clay tile hipped roof at the Library wing, which is framed with wood trusses. Otherwise, the roofs are flat with built-up type finishes.

All exterior materials and elements of the 135 Van Ness building wings exhibit damages and effects of age:

- Terra cotta ornamentation exhibits varying degrees of deterioration throughout the building facades, in particular at roof parapets.
- Wood windows suffer from deferred maintenance and have thus deteriorated, in particular on the south facing facades.³
- Clay roofs are in need of extensive repairs, with loose and missing tiles, and miscellaneous patch work with contrasting material.
- The Gymnasium wing is severely cracked in the transverse direction between the window bays at the east end of this wing. Testing work has concluded that this crack was caused by the earthquake and is due to a joint placement in the original concrete construction.

At the interiors, each of the wings underwent degrees of alteration work when they were converted to offices in the early 1950s. Original conditions at the Gymnasium north wing were the most affected by such alteration, as non-bearing partitions were constructed to convert the open gym space to offices. The Main building and south wing accommodated the office uses with limited disruption of original fabric.

IMPACTS AND MITIGATION MEASURES

CEQA states that a project will have a significant effect on the environment if a project disrupts or adversely affects a property of historic or cultural significance to a community or ethnic or social group. The criteria of effect for determining whether the proposed School of the Arts project would have a significant effect on historic resources entail the National Register of Historic Places, the City of San Francisco Landmarks Listing, and the City of San Francisco-designated Historic or Conservation District. Any project that includes the demolition of, or threatens the integrity or context of, an historic resource (building or site) will be considered to have a significant environmental effect.

The existing project site, the former High School of Commerce, has been designated as Historic Landmark Number 140 by the City of San Francisco and is within the boundaries of the City designated Civic Center Historic District. The landmark designation includes the entire block: the 170 Fell Street and the 135 Van Ness Avenue buildings, the Nourse Auditorium and the interior courtyard/parking lot. The 135 Van Ness Avenue building was also rated "2" by Department of City Planning's 1976 citywide architectural inventory, and an "A" rating by Heritage. The 170 Fell Street building was rated "B" by Heritage. Both buildings are designated as contributory buildings in the City designated Civic Center Historic District.

The proposed project would convert the former High School of Commerce to a new School of the Arts for the SFUSD. The proposed project includes the demolition of the 170 Fell Street building; construction of a new building to replace 170 Fell Street; streetscape improvements on Van Ness Avenue and Fell Street; construction of a new courtyard to replace the existing yard/parking lot; adaptive reuse of the 135 Van Ness Academic, Gymnasium and Library wings; and rehabilitation of the Nourse Auditorium.

170 Fell Street

Impact B.1: Demolition of the 170 Fell Street building would have a significant impact on historic resources of the High School of Commerce site.

The demolition of the former Newton J. Tharp Commercial High School building at 170 Fell Street would be a detrimental effect on the landmark property, because of the building's historic

importance, and around which the High School of Commerce Complex and its site were shaped. The proposed removal of 170 Fell would also have an effect on the property's potential historic value, as the California State Office of Historic Preservation (SOHP) has formally indicated that 170 Fell Street is potentially eligible for the National Register of Historic Places due to both historic and architectural integrity of the building.

The SFUSD developed a detailed and comprehensive program plan for the expansion and relocation of the SOTA. The programmatic needs for SOTA were identified and program space definitions were established for the following functions: administration, academic, arts programs, shared facilities, art education resources, the Nourse Auditorium, and use of exterior space (see Project Description, page 3-1). Given the objectives and programs of SOTA, the SFUSD has determined that rehabilitation of the 170 Fell Street building would not be in the best interest of the SFUSD and the citizens of San Francisco.

The proposed replacement building is a four-story structure designed for the performing and musical components of SOTA, with associated classrooms, offices, galleries and services (Figures 18 through 21, pages 4-22 to 4-25). Its program areas total about 67,000 square feet, approximately equivalent to the area of the existing 170 Fell Street building. The proposed building is positioned lengthwise on Franklin Street with a new primary entryway to the school complex off Fell Street between the new building and the south wing of the 135 Van Ness Avenue building on Fell Street. This new entrance is intended to reorient the complex, to provide a fully handicapped accessible entrance at this location, and to convert the existing main entry on Van Ness Avenue into a ceremonial entrance.

The primary orientation of the proposed building is directed to the courtyard at the site's interior, with relatively closed facades on Franklin Street and at the Fell Street corner. While its orientation and overall massing defer to the context of the existing site and buildings, the new building design intentionally juxtapose the contemporary with the traditional, indicating a building distinguished by its exuberant, unornamented volumes, starkly contrasting the modest yet ornamental forms of the extant school buildings.



Source: Square One Productions

PHOTOMONTAGE FROM THE ROOF OF 25 VAN NESS AVENUE LOOKING NORTH FIGURE 18



Source: Square One Productions

PHOTOMONTAGE FROM FELL AND FRANKLIN STREETS LOOKING NORTH FIGURE 19



Source: Square One Productions

PHOTOMONTAGE FROM HAYES AND FRANKLIN STREETS LOOKING SOUTH FIGURE 20



Square One Productions

G WEST ACROSS INTERIOR COURTYARD FIGURE 21

Mitigation Measure B1: To address the impacts associated with the demolition of the building at 170 Fell Street, the applicant shall prepare documentation in accordance with the Historic American Buildings Survey (HABS) standards prior to demolition. Archival quality, large format photographs (or videotape) of the interior and exterior of the building at 170 Fell Street should be included in the HABS documentation. A major public historical archive (e.g., the San Francisco Public Library) should be the repository of the HABS document. Upon implementation, this measure would ensure that documentation regarding the history and architectural style associated with the building at 170 Fell Street would exist for future research and reference.

Significance After Mitigation: *Significant.*

135 Van Ness Avenue

Impact B2: The School of the Arts project would adaptively reuse the 135 Van Ness Avenue building and the Nourse Auditorium.

Schematic design plans for converting the former 135 Van Ness Avenue Building for SOTA use include the following specific alterations: (1) adaptive reuse of the south Library wing to a rehearsal hall and associated accessory uses; (2) adaptive reuse of the main 135 Van Ness building to house classrooms, laboratories, administrative offices, and associated accessory uses; (3) adaptive reuse of the north Gymnasium wing for visual arts studios and associated accessory uses; and (4) limited alterations of the Nourse Auditorium to provide improved facilities and seismic upgrade. Rehabilitation of both the 135 Van Ness building and the Nourse Auditorium would also include seismic structural retrofitting throughout to meet Field Act standards, anchoring and cleaning of terra cotta tiles and ornamentation, replacement of existing windows and some of the doors.

The primary effects on the exterior of the 135 Van Ness Avenue Building from the proposed adaptive reuse and alteration work would be concentrated at the Gymnasium wing, where substantial structural work would be required to repair the damage sustained from the Loma Prieta earthquake and to implement structural upgrade requirements of Title 24 of the State Building Code governing school use. Specifically, concrete slabs at both the second floor and the roof are proposed to be removed and replaced; all hollow clay tile walls and partitions would be removed. The first floor wall separating the exterior arcade from the interior of the

Gymnasium wing would be removed and reconstructed, including the original double hung windows therein. Other proposed structural work would occur throughout each wing (see Figures 7, 8, 9, and 10, pages 3-10 to 3-13).

At both the north Gymnasium and south Library wings, new pilasters are proposed to be added enclosing the new structural support with the arcade areas. The pilasters would be more noticeable at the Gymnasium wing due to the installation of new steel moment frames to meet lateral force requirements. Construction of the new pilasters at the north wing would require modification of the ornamental brackets and beams within the arcade, thereby affecting the spatial proportions of the arcade. Pilasters proposed in the arcade at the Library wing would be shallower and would not affect any existing decorative elements because this arcade is not presently embellished.

Strengthening of the main 135 Van Ness Avenue building would consist of the construction of several new interior concrete shear walls; the addition of new reinforced concrete at the interior face of selected exterior wall locations; and new structural collectors at floor slabs to connect new concrete structural elements. All existing windows are proposed to be replaced in order to provide appropriate sound insulation for the classrooms.⁴ All hardware and doors would be replaced and the building must be made handicapped accessible.

In addition to structural work, classrooms, toilet rooms and service spaces throughout the Academic wing would be new, excepting for a pair of historic toilet rooms adjoining the main entry and lobby, which are proposed to be restored.

Nourse Auditorium

The proposed improvements to the Nourse Auditorium would structurally strengthen and improve accessibility in the building. The structural work would consist of introducing new concrete shear wall elements at the interior face of selected exterior and lobby walls, requiring the potential removal and reinstallation of ornamental wall materials. The ornamental plaster ceiling would require both structural and non-structural improvement.

Landscaping

The streetscape plan shows prototypical street tree planting along the sidewalks on Van Ness Avenue and Fell Street, the former would be in keeping with the street landscaping recommendations of the *Van Ness Avenue Plan*. No new streetscape work is proposed along either Hayes or Franklin Streets.

The proposed landscape plans call for additional trees and lighting at each of the primary entryways, the new one at Fell Street and the existing entrance on Van Ness Avenue.

The schematic design scheme for the courtyard proposes a design with a centralized, informal gathering and performance space, circumscribed by a zone of circulation between this central space and the buildings, and transitioning to the orthogonal building forms with a border of plantings at the building edge. Existing entries would be maintained with the addition of access ramps. The original paving pattern would be replicated (see Figures 18 and 21, pages 4-22 and 4-25).

Mitigation Measure B2: None required.

NOTES - Architectural and Historic Resources

- ¹ As noted on page 3-15 in Chapter 3, the SFUSD has adopted Resolution No. 59-12W3, August 30, 1995, which exempts the project from the jurisdiction of the City and County of San Francisco.
- ² The discussion of the project area, the 135 Van Ness Avenue Building and the 170 Fell Street Building is based on the report, "Cultural Resource Evaluation, School of the Arts, San Francisco" September 12, 1996, by Page & Turnbull. This report is on file at the SFUSD Facilities Planning and Construction Department at 1551 Newcomb, San Francisco.
- ³ S.M.G. Consulting, Exterior Wall Consultants, *Feasibility Report for Replacement or Repair of Windows and Entry Doors*, Letter to Cheryl Gaston, October 29, 1996
- ⁴ Illingworth and Rodkin, Inc., *Evaluation of the Facade Noise Reduction for the San Francisco Unified School District School of the Arts Adaptive Re-use Project*, dated September 27, 1996. This report is on file for public review at the SFUSD Facilities Planning and Construction Department, 1551 Newcomb Avenue, San Francisco.

C. TRANSPORTATION¹

SETTING

The project site is the entire block bounded by Van Ness Avenue, Franklin Street, Hayes Street, and Fell Street, in the southern portion of the central Van Ness Avenue Corridor. On-site parking at the courtyard is accessible via Franklin Street. The site area is served by local streets and by portions of the regional freeway system (see Figure 1, page 3-2). Primary access to freeways U.S. 101 and I-80 via Van Ness Avenue is approximately one-quarter mile from the site, via ramps at 13th Street and South Van Ness Avenue, and Eighth and Bryant Streets, respectively.

Regional Network

Changes to San Francisco's regional transportation network were brought about by the 1989 Loma Prieta earthquake, and included closure and/or demolition of several freeways and associated facilities. Recent work has included the reopening of the section of I-280 between Cesar Chavez Street (Army Street) and U.S. 101, the demolition of the Terminal Separator Structure (a series of on-and off-ramps linking the Bay Bridge with surface streets in the vicinity of Mission, Main and Beale Streets), the demolition of the Embarcadero Freeway (I-480), and the demolition of a portion of the Central Freeway between Turk and Fell Streets.

The Central Freeway runs from I-80/U.S. 101 over Market Street into Hayes Valley, providing regional freeway access to western parts of San Francisco. The 1989 Loma Prieta earthquake severely damaged the Central Freeway, and the double-deck segment extending from Page Street to the Gough Street on-ramp and the Franklin Street off-ramp was demolished. Portions of the Central Freeway were temporarily braced, but were still considered unsafe in the event of another major earthquake. On August 25, 1996, Caltrans also demolished the segment of the Central Freeway between the Mission Street/South Van Ness Avenue and Oak Street on-ramp. The lower deck, providing access to the Fell Street off-ramp, remains. The time of the reopening of the Oak Street on-ramp is indefinite.

The City currently conducting planning studies to evaluate alternatives for the replacement of the segment of the Central Freeway north of Mission Street/South Van Ness Avenue. Currently no decisions have been made on a specific replacement alternative, and its effects on future traffic

circulation patterns in the project area are unknown. Consequently, the transportation analysis for the School of the Arts project assumes no change in the current Central Freeway configuration.

Local Network

The existing street network in the project area includes several major thoroughfares, including Market Street, Van Ness Avenue, Franklin Street and Gough Street. There are also a number of local streets associated with the Hayes Valley neighborhood, including Hayes and Fell Streets.

Market Street, located one block south of the project site, is a northeast-southwest arterial running from the Ferry Building to Twin Peaks. In the vicinity of the project site, Market Street has two lanes in each direction and serves as a major transit corridor.

Van Ness Avenue is a north-south thoroughfare running from Market Street to Aquatic Park (a distance of approximately two miles). Van Ness Avenue forms the eastern boundary of the project site, where it has three travel lanes in each direction, 16-foot-wide sidewalks, and a divided median.

Franklin Street, a north-south roadway providing access between Market Street and Fort Mason, forms the western boundary of the project site. Between Market Street and Lombard Street, Franklin Street is a one-way northbound roadway with three travel lanes and restricted parking lanes on both sides of the street.

Gough Street is located one block west of the project site, where it provides three southbound travel lanes and restricted parking lanes on both sides of the street. Hayes Street and Fell Street respectively form the northern and southern boundaries of the project site. In the immediate vicinity of the site, Hayes Street runs one-way westbound and Fell Street runs one-way eastbound, each with three travel lanes and restricted curbside parking.

The *San Francisco General Plan* designates Transit Preferential Streets, which are considered important streets for transit operations where interference with transit vehicles by other traffic should be minimized.² The General Plan also designates Major Arterials, which are major routes

designated to carry crosstown and local traffic. In the vicinity of the project site, Transit Preferential Streets include Market Street and Van Ness Avenue, and Major Aterials include Market Street, Van Ness Avenue, Gough Street, Franklin Street, Fell Street, and Oak Street (west of Franklin Street). There are no General Plan-designated Citywide Bike Routes on streets in the project study area.

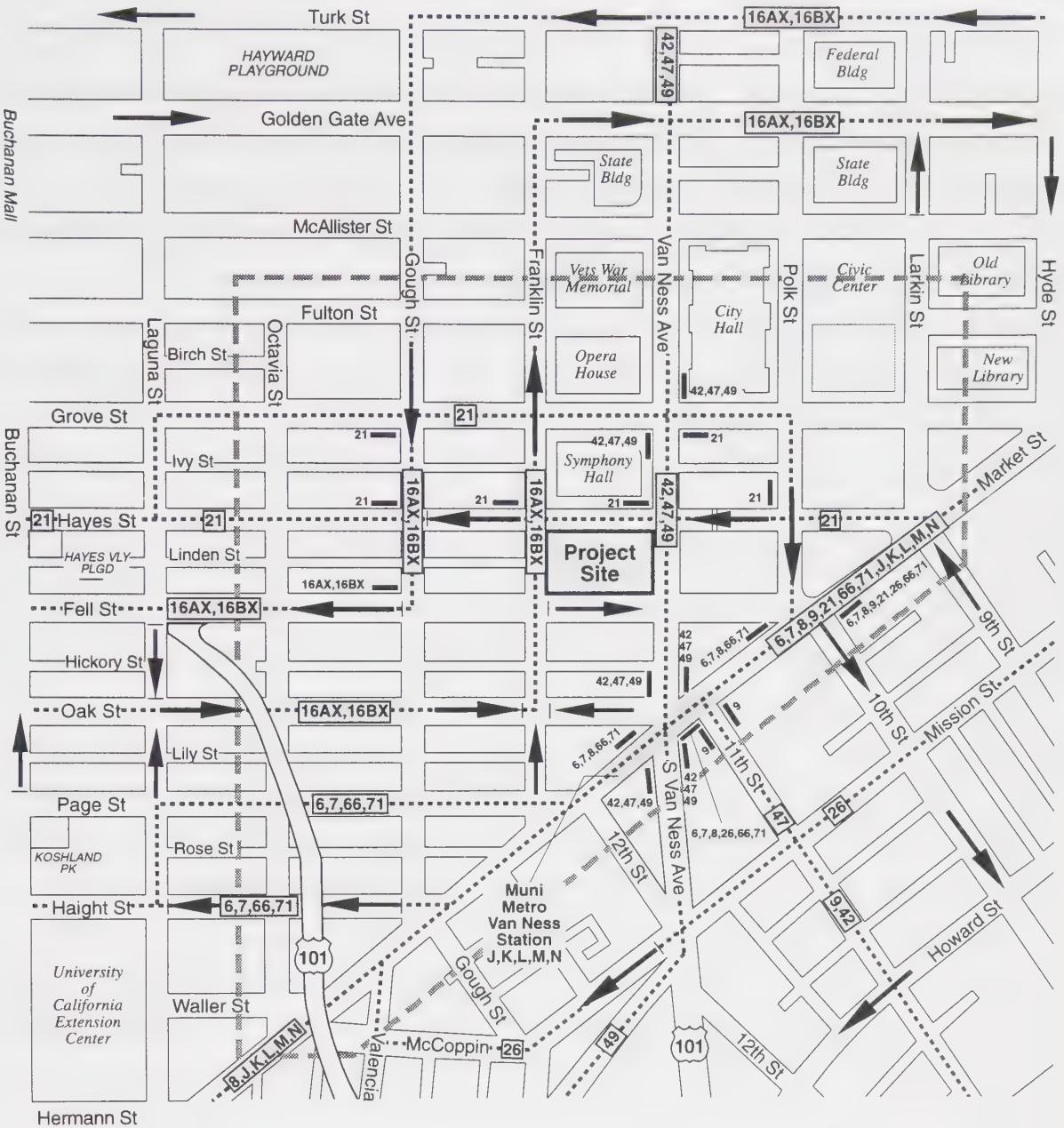
Transit

As shown in Figure 22, page 4-32, the project site is well served by the San Francisco Municipal Railway (MUNI) and regional transit operators. Stops for approximately 18 MUNI lines are within walking distance of the project site (one-quarter mile), including the Van Ness Avenue MUNI Metro Station. The closest MUNI stop to the project site is adjacent to the site at the northwest corner of the Van Ness Avenue/Hayes Street intersection, serving the 21-Hayes Street line. Fifteen other MUNI lines stop one block south of the project site, at Van Ness Avenue and Market Street, including 6-Parnassus, 7-Haight, 8-Market, 9-San Bruno, 26-Valencia, 42-Downtown Loop, 47-Van Ness, 49-Van Ness-Mission, 66-Quintara, 71-Haight-Noriega, and Metro lines J-Church, K-Ingleside, L-Taraval, M-Ocean View, and N-Judah.

Golden Gate Transit, which provides regional service to Marin County, stops near the project site at Golden Gate Avenue/Polk Street and McAllister Street/Polk Street. The San Mateo County Transit District (SamTrans), which provides regional service to the Peninsula, stops near the project site at Van Ness Avenue/Market Street and Van Ness Avenue/Hayes Street. The Civic Center BART Station, which provides regional access to Contra Costa, Alameda and San Mateo Counties, is located approximately three blocks east of the project site. Other regional transit services, including Alameda County (AC) Transit and CalTrain, do not serve the project site directly, but may be reached by transferring from the appropriate MUNI lines.

Pedestrian

Along the perimeter the project site, the intersections of Franklin Street/Hayes Street, Van Ness Avenue/Hayes Street, and Van Ness Avenue/Fell Street have pedestrian crosswalks on all four approaches. However, the intersection of Franklin Street/Fell Street does not have a crosswalk on the east side of Franklin. The intersection of Van Ness Avenue/Market Street is identified in the *San Francisco General Plan* as a Transit Center,³ which has bus stops that serve 10 MUNI



LEGEND

--- [21] --- MUNI Line

6,7,66,71 — Transit stop

→ Direction of one-way flow

— — — Study area boundary



Source: Korve Engineering

STREET NETWORK AND TRANSIT ROUTES IN THE PROJECT AREA **FIGURE 22**

transit lines, five MUNI Metro lines and BART. This intersection has crosswalks on all four approaches, thus providing convenient and safe crossing for transit riders travelling between the bus stops and the project site. At the intersection of Van Ness Avenue/Oak Street, however, there is no crosswalk on the north side of Oak Street. Pedestrians needing to cross Van Ness Avenue at Oak Street must cross at Market Street.

Pedestrian conditions on the crosswalks of Van Ness Avenue/Fell Street and Van Ness Avenue/Hayes Street are generally free flow, with little conflict with other pedestrians during the weekday AM peak hour (7:30 a.m. to 8:30 a.m.). Pedestrian volumes at these intersections are low (i.e., 50 to 100 pedestrians per hour). Pedestrians are basically moving in desired paths without altering their movements and are able to freely select walking speeds. The sidewalk on the west side of Van Ness Avenue, between Hayes Street and Fell Street, is approximately 16-feet wide. Pedestrian conditions along this sidewalk are currently unrestricted, with little conflicts.

Parking

A survey was conducted of on- and off-street parking supply and occupancy conditions within a two-block radius of the project site (an area bounded by Fulton Street to the north, Larkin Street to the east, Market Street to the south, and Octavia Street to the west).⁴

A total of approximately 1,275 on-street parking spaces are located with the parking survey area, consisting of 445 unrestricted spaces, 40 special-purpose/colored zone spaces, 140 time-restricted spaces, and 650 metered spaces. The on-street parking occupancy rate in the survey area was approximately 88 percent during the weekday midday period, and 86 percent during the weekend evening period. Streets in the survey area currently are at 100 percent occupancy during both periods generally include Octavia Street, Franklin Street, Polk Street, Grove Street, Ivy Street, Hayes Street, Fell Street, and Oak Street. It should be noted, however, that during the time of the on-street parking survey, construction activities were occurring at the War Memorial Opera House and at City Hall, resulting in the closure of some parking lanes, implementation of special permit parking, and the use of on-street spaces by construction workers. Therefore, the results of the on-street parking survey are considered to be slightly skewed, and the average on-street occupancy rate under typical conditions is expected to be lower.

The off-street parking survey considered supply and occupancy conditions at 33 parking facilities (24 public and 9 private) in the vicinity of the project site. The public facilities consist of approximately 2,620 parking spaces and the private facilities consist of approximately 325 parking spaces, resulting in a total of 2,945 off-street parking spaces. Off-street parking occupancy during the weekday midday period is estimated to be 62 percent in public facilities and 65 percent in private facilities, while during the weekend evening period, it is 30 percent for public facilities and 35 percent for private facilities.

IMPACTS AND MITIGATION MEASURES

Cumulative Context

Introduction

Prior to the 1989 Loma Prieta earthquake and the recession of the early 1990s, the cumulative context for future transportation conditions in San Francisco and the Bay Area was based on future year 2000 and 2010 analyses presented in the *Mission Bay EIR* and the *South of Market EIR*. These estimations of future conditions have been superseded with the recently completed analysis conducted for the *Alternatives to Replacement of the Embarcadero Freeway and the Terminal Separator Structure DEIS/DEIR*⁵ and the preliminary studies for the Central Freeway. The analyses conducted as part of these recent studies incorporate the changes to the regional and local street network following the Loma Prieta earthquake, and updated estimates of economic growth and change in San Francisco and the Bay Area prepared by the Association of Bay Area Governments (ABAG).

Overall, the results of the Central Freeway and the Embarcadero/TSS Replacement analyses are consistent with previous studies, in that in the future, more congested highways combined with improvements in transit would result in a shift from autos (especially solo drivers) to transit and ridesharing for trips to and from the downtown and vicinity, which includes the SOTA project site. The relevant transportation analysis from the *Alternatives to Replacement of the Embarcadero Freeway and the Terminal Separator Structure DEIS/DEIR* are incorporated by reference and summarized below.

Future Travel Demand

The *Alternatives to Replacement of the Embarcadero Freeway and the Terminal Separation Structure EIS/EIR* analysis includes evaluation of transportation conditions in the year 2015. Future travel demand was estimated using the regional travel demand forecasting model developed by the Metropolitan Transportation Commission (MTC). This model utilizes the Association of Bay Area Governments (ABAG) land use database in the nine county San Francisco Bay Region to determine the number of future daily and peak period trips.

Based on citywide ABAG projections for year 2010, information on approved projects in downtown, and reasonable assumptions regarding future development, the City and County of San Francisco Planning Department developed, as part of the environmental review process, year 2015 estimates of the number of households and employees at the Traffic Analysis Zone level. ABAG 92 projections for the year 2010 were adjusted for downtown San Francisco zones in Superdistricts 1 (northeast quadrant) and 3 (southeast quadrant), and extrapolated to develop year 2015 conditions. In total, employment in San Francisco is expected to increase between 1990 and 2015 by 165,631 jobs (28 percent increase), and the number of households is expected to increase by 45,572 dwelling units (15 percent increase). Superdistrict 1, which includes the Financial District, is anticipated to experience the greatest growth of the four Superdistricts (the project is in Superdistrict 2 adjacent to Superdistrict 1). Employment is anticipated to increase by 128,292 jobs (32 percent increase), and households by 39,449 dwelling units (68 percent increase).

A study conducted for the Planning Department following the development of year 2015 land use estimates by the Planning Department specified lower estimates of employment. However, the total difference for those travel analysis zones in the downtown area between the preliminary and the revised estimates was less than four percent, and even lower (less than one percent) for the four San Francisco Superdistricts as a group. As a result, the Planning Department estimates were assumed to be valid and were used in the analysis.⁶

Daily travel demand estimates were developed using the updated year 2015 land use database and the transportation network included in the year 2010 MTC travel demand forecasting model. Between 1990 and 2015 it is anticipated that there would be an increase of 581,189 (15 percent

increase) in total persons trips per day (auto plus transit). Transit trips would increase by 22 percent, while auto trips would increase by 13 percent. The greatest increase for both auto and transit would be in Superdistrict 1, and Superdistrict 3.

The proposed project is expected to be completed, occupied and the amount of net new space attributed to the project absorbed by 2005. Therefore, the impacts of the project and contribution to cumulative transportation impacts would occur within the 1998 to 2015 context.

Regional Travel⁷

The October 1989 Loma Prieta earthquake rendered many freeway sections and freeway ramps serving San Francisco inoperable. The closure and/or demolition of freeways affected accessibility to and from San Francisco, particularly the northeast quadrant of the City, the area generally north of Bryant Street and east of Van Ness Avenue. The primary freeway facilities that provided access to San Francisco include: I-280, the Embarcadero Freeway (SR 480) and the Central Freeway (U.S.101). All three were severely damaged as a result of the earthquake and had to be closed immediately following the earthquake. A brief summary of the status of each freeway follows:

Embarcadero Freeway: Prior to the earthquake the Embarcadero Freeway provided access to downtown San Francisco and the northeast waterfront via the Main/Beale, Washington/Clay and Broadway ramps. The closure of the freeway following the 1989 earthquake gave the City an opportunity to evaluate its role in serving the downtown street network and the I-80/U.S. 101 connections in relation to its location on the Bay shoreline. As a result, in 1990, the San Francisco Board of Supervisors passed a resolution endorsing the demolition of the Embarcadero Freeway and calling for the evaluation of alternatives to an elevated structure. The demolition of the Embarcadero Freeway and associated ramps resulted in a reduction in congestion at the ramp locations, but affected local traffic by dispersing regional traffic onto local streets.

Five project alternatives have been evaluated as part of the environmental review process. They include a "No Build" alternative and four "Build" alternatives. On January 29, 1996 the San Francisco Board of Supervisors selected one of the build alternatives (the DPT Variant

Alternative) as the preferred project alternative. The DPT Variant Alternative would realign and upgrade the existing surface roadway along The Embarcadero between Folsom Street and Broadway, providing three continuous traffic lanes in each direction during the AM and PM peak periods, with the curb lanes providing parking in off-peak periods. This alternative would modify the existing Fremont Street off-ramp from I-80 westbound to allow traffic direct access to Folsom Street. It would also provide additional off-ramp capacity from I-80 eastbound by widening the freeway's approach to the existing Fourth Street off-ramp.

I-280: The I-280 Freeway, which provides access between downtown San Francisco and the Peninsula and the southwestern areas of the City, was also damaged in the 1989 earthquake. The damage was not substantial enough to merit demolition, and Caltrans decided to seismically upgrade the facility. Phase I of the retrofit effort, which consisted of substantial closures of the freeway and ramps, was completed in December 1995. The on-going Phase II retrofit effort will not involve any lane closures during the peak periods, and is anticipated to be completed by the end of 1997.

The closure of I-280 resulted in an increase in traffic on I-80/U.S. 101 and on ramps serving downtown San Francisco. With the recent completion of the Phase I earthquake retrofit effort, I-280 has become available to Peninsula and southwest San Francisco traffic. The planned modifications to I-280 involving the realignment of the Berry Street off-ramp to touch down at King Street near 5th Street and construction of a new corresponding on-ramp at King Street, combined with the reconstructed The Embarcadero would serve to improve access to I-280 from downtown and the waterfront. These modifications are expected to be completed by the end of 1997.

Central Freeway: The earthquake severely damaged portions of the Central Freeway that extended northwest from U.S. 101 to the vicinity of the Gough and Ellis Streets. Following the earthquake, the freeway was demolished back to the Oak/Fell ramps and the remainder of the concrete structure was braced. With the removal of the northern portion Central Freeway, traffic decreased on Gough and Franklin Streets that served the ramps, but increased on the remaining ramps and roadways leading to these ramps. This includes Fell Street, Mission Street, Van Ness Avenue and South Van Ness Avenue.

The City is currently conducting planning studies to evaluate alternatives for the replacement of the remaining section. In addition to retrofit of the existing structure, alternatives being considered for evaluation in the EIS/EIR for the Central Freeway would consist of new on- and off-ramps at Duboce Avenue to handle Upper Market traffic and modification of the Mission Street off-ramps. These improvements would facilitate access to and from the proposed project site. The California Department of Transportation (Caltrans) and the City have agreed that prior to selection of an alternative for the replacement of the Central Freeway, the upper deck will be removed, and the lower deck will be widened and made accessible to two-way traffic; temporary closure of the freeway and removal of the upper deck is expected to be completed by December 1996.

Local Streets

Following the Loma Prieta earthquake and subsequent closure and/or demolition of regional facilities, traffic volumes on local streets generally increased, although some decreases occurred on other streets, primarily those serving as access routes to/from the ramps.

Between 1990 and 2015, daily auto trips in San Francisco are anticipated to increase by 13 percent. This would result in an increase in the number of vehicles using the regional freeway facilities to access and travel through San Francisco, as well as vehicles traveling on local streets. The projected increase in overall trips in the City would result in an increase in traffic on local streets in the future, as new freeways are not proposed to replace all of those demolished (part of the Central freeway will be replaced).

The vehicular traffic associated with the proposed project would be part of the cumulative increase in traffic on the regional facilities and local street network; however, project traffic would not contribute substantially to the cumulative conditions. The project traffic represents less than one percent of the total growth in AM peak hour vehicular traffic between 1990 and 2015. The contribution of the project to the regional bridges and freeways would be minimal, as the majority of the trips (approximately 80 percent) would be from locations within San Francisco and would use local streets to access the project site. The remaining 20 percent of the project vehicle trips would be from outside San Francisco and would primarily use U.S.101 to access the local streets, as most of these trips would come from the south bay. The proposed project would also

contribute to the cumulative traffic conditions on local streets, including Van Ness Avenue, Gough and Franklin Streets. The project trips, however, would not substantially affect the cumulative conditions on these facilities.

The duration of the AM peak period during which regional and local facilities are operating at capacity is expected to increase in the future. This extension or "spreading" of the AM peak period is expected to occur due to overall growth in traffic and no substantial changes to the capacity of the regional and local roadway facilities. The proposed project traffic would result in an increase in the AM peak hour traffic volumes on regional and local facilities, and would, therefore, contribute to the expected spreading of the peak. However, the project would not be a substantial contributor to the AM peak spread.

Transit

Transit services in the year 2015 would be similar to those existing today, except that several planned transit projects are expected to be constructed by 2015. MUNI's planning objectives include meeting transit demand and accommodating future growth and transportation patterns, and it is anticipated that transit service will be adapted to meet the changing demands within the constraints of declining federal and state operating assistance. These objectives are consistent with the City's "Transit First" policy that indicates that the City has established transit as the preferred mode of transportation for satisfying growing travel demand.

Planned transit services to accommodate future demand include:

- MUNI Metro extension along The Embarcadero between Market Street and Third/King Street. The MUNI Metro turnback at the foot of Market Street is currently under construction. Tracks and stations south of Market Street to Fifth/King Streets have been completed.
- The F-Market electric streetcar extension from Upper Castro to Fisherman's Wharf via Market Street and The Embarcadero. The segment between Upper Castro and Fremont Street is currently in service, and the segment on The Embarcadero between Broadway and Fisherman's Wharf is under construction.
- BART service on the Daly City line extended to the San Francisco International Airport, and decreased service headways from the 3.75 minutes to 2.25 minutes. BART extensions to Pittsburg and Dublin in the East Bay are also assumed to be in place by

2015. The BART extensions to North Concord and Colma have recently been opened and those stations are in operation.

- CalTrain service extension to downtown San Francisco, and service level increases in the number of trains.

Other transit service providers in San Francisco (the Airporter, Amtrak feeder buses, Gray Line, Golden Gate Bridge, Highway and Transportation District (GGBHTD), SamTrans, AC Transit and other private bus operators) are assumed to offer services similar to those provided today, with adjustments for duplication with planned projects noted above, and possible service increases in response to travel demand.

As identified in the Future Travel Demand discussion above, the number of persons using transit to access or leave San Francisco is expected to increase by approximately 22 percent between 1990 and 2015. This increase is greater than the increase in auto traffic and reflects the shift to transit due to increasing congestion in the Bay Area and improvements in transit services. The increase in the use of transit would be most substantial in Superdistrict 1 (25 percent increase) and Superdistrict 3 (39 percent increase).

The approximately 450 AM peak hour transit trips on a weekday generated by the proposed project would be part of the overall increase in Superdistrict 1, and would primarily affect local MUNI transit lines rather than regional transit service.

IMPACTS AND MITIGATION MEASURES

An impact would be considered significant and unavoidable if, for intersections that would operate at LOS E or F prior to the addition of project traffic and identified mitigation measures would not achieve LOS D or better. In cases where mitigation would improve intersection operations and mitigate project-generated traffic impacts back to baseline conditions or better, but not achieve LOS D or better, the impact is considered a cumulative significant unavoidable impact.

Intersections

Level of Service (LOS) of an intersection is a measure of the ability of the intersection to accommodate traffic volumes. The LOS is based on the average stopped-delay-per-vehicle-per-lane for various movements within the intersection. Intersection LOS ranges from LOS A, which indicates free-flowing conditions with short delays, to LOS F, which indicates congested conditions with extremely long delays (Appendix C includes more detailed descriptions of Levels of Service at signalized intersections). LOS D (or better) represents traffic operations at signalized intersections within the acceptable LOS range. LOS E (or worse) represents conditions that are not within the acceptable LOS range.

Arterials

Under the guidelines administered by the San Francisco City and County Congestion Management Agency, impacts on Congestion Management Program (CMP) system arterials are considered to be significant when the level of service deteriorates below LOS E conditions.

Transit

An impact on the MUNI public transit is considered to be significant if project demand would exceed anticipated capacity; i.e., if the addition of the School of the Arts project's transit trips to the baseline conditions results in an increase in the load factor of the respective line (load factors varies among the type of buses).

Parking

For the purposes of this EIR, parking impacts would be considered to be significant if the project's parking demand exceeds existing parking supply in the area and there are no convenient and legal off-site parking spaces in proximity to the project site.

Pedestrians

Pedestrian impacts would be considered to be significant if (1) there were not adequate facilities/crosswalks to connect to the area circulation system, or (2) vehicles would cross pedestrian facilities/crosswalks on a regular basis without signals, or (3) where Americans with

Disabilities Act (ADA) requirements would not be met, or (4) where the addition of project-related pedestrian trips would cause the pedestrian Level of Service at the crosswalks to deteriorate to below LOS D.

Travel Demand

Project travel demand refers to the total new traffic a proposed project would generate. Table 2, page 4-43, presents the estimated weekday AM peak hour person trip-ends (PTEs) that would be generated by students, faculty and staff of the proposed project (one PTE is a one-way trip; a visitor to the who arrives at and later leaves the project generates two PTEs). As the table indicates, the proposed project would generate total of 740 net new weekday AM person-trips. Table 3, page 4-43, presents the estimated weekday AM peak hour vehicle-trip generation for students, faculty and staff of the proposed project. As shown in the table, the proposed project would generate approximately 485 net new vehicle-trips (285 inbound and 200 outbound) during the weekday AM peak hour. It was assumed that all of the vehicle-trips during the AM peak hour would be inbound to the project site, except for the outbound trips generated by vehicles leaving the project site after dropping off students.

Traffic

Local Intersection Traffic. Eight intersections in the project vicinity were selected to be studied to determine the effects of project-generated traffic (see Figure 23, page 4-45). The eight intersections, selected by the San Francisco Unified School District, include:

- Van Ness Avenue/Hayes Street
- Van Ness Avenue/Market Street
- Franklin Street/Fell Street
- Gough Street/Market Street
- Van Ness Avenue/Fell Street
- Franklin Street/Hayes Street
- Franklin Street/Market Street
- Laguna Street/U.S. 101 Off-Ramp

A discussion of the methodology used in the analysis of the study intersections appears in Appendix C of this EIR. The analysis considers weekday AM peak-hour (7:30-8:30 a.m.) travel conditions at the study intersections under three scenarios (existing, existing-plus-project, and

Table 2
AM PEAK HOUR PERSON-TRIP GENERATION

	LAND USE	SIZE	AM PEAK HOUR PERSON-TRIP RATE*	TOTAL AM PEAK HOUR PERSON-TRIPS	INBOUND	OUTBOUND
PROPOSED	School (student)	1,000 students	0.88 trips/student	880	880	0
	School (faculty/staff)	50 faculty/staff	1.00 trip/faculty	50	50	0
EXISTING	Office	82,000 gsf	2.3 trips/1,000 gsf	-190	-190	0
NET NEW AM PEAK HOUR PERSON-TRIPS				740	740	0

Notes: * - Based on the results of the student survey of the existing school, located at 700 Font Boulevard, approximately 88% of the students arrive during the AM peak hour (i.e., between 7:30 AM and 8:30 AM). Based on information provided by the existing school faculty, 100% of the faculty/staff arrive during the AM peak hour. The AM peak hour person-trip generation rate for the existing SFUSD office was derived from rates provided in the *Guidelines For Environmental Review: Transportation Impacts*, July 1991, Appendix 1, published by the City and County of San Francisco, Department of City Planning, and the *Trip Generation Manual*, 5th Edition, published by the Institute of Traffic Engineers (ITE).

Source: Korve Engineering

Table 3
AM PEAK HOUR VEHICLE-TRIP GENERATION

	LAND USE	SIZE	TOTAL AM PEAK HOUR VEHICLE-TRIPS*	INBOUND	OUTBOUND*
PROPOSED	School (students)	1,000 students	500	300	200
	School (faculty/staff)	50 faculty/staff	48	48	0
EXISTING	Office	82,000 gsf	-63	-63	0
NET NEW AM PEAK HOUR VEHICLE-TRIPS			485	285	200

Notes: * - Vehicle-trip generation for the students is based on mode split information obtained from the student survey of the existing school, while vehicle-trip generation for the faculty/staff is based on mode split information provided by the school faculty. Appendix E contains the derivation of the AM peak hour vehicle-trips for the students. The vehicle-trip generation for the existing SFUSD office was obtained from mode split information provided by the San Francisco Planning Department.

* - Outbound vehicle-trips represent vehicles leaving the project site after dropping off the students.

Source: Korve Engineering

year 2010 cumulative-plus-project). The discussion below summarizes information contained in Table 4, page 4-46.

Impact C1: Traffic-generated impacts by the proposed project would result in slight increases in vehicle delay at most of the study intersections, but service levels would not change.

As shown in Table 4, under existing conditions, all study intersections operate at acceptable service levels (i.e., LOS D or better), except the intersection of Van Ness Avenue/Fell Street, which operates at LOS F. The Van Ness Avenue/Fell Street intersection would continue to operate at LOS F under existing-plus-project conditions; however, this unacceptable level of service would not be the result of project-related traffic.

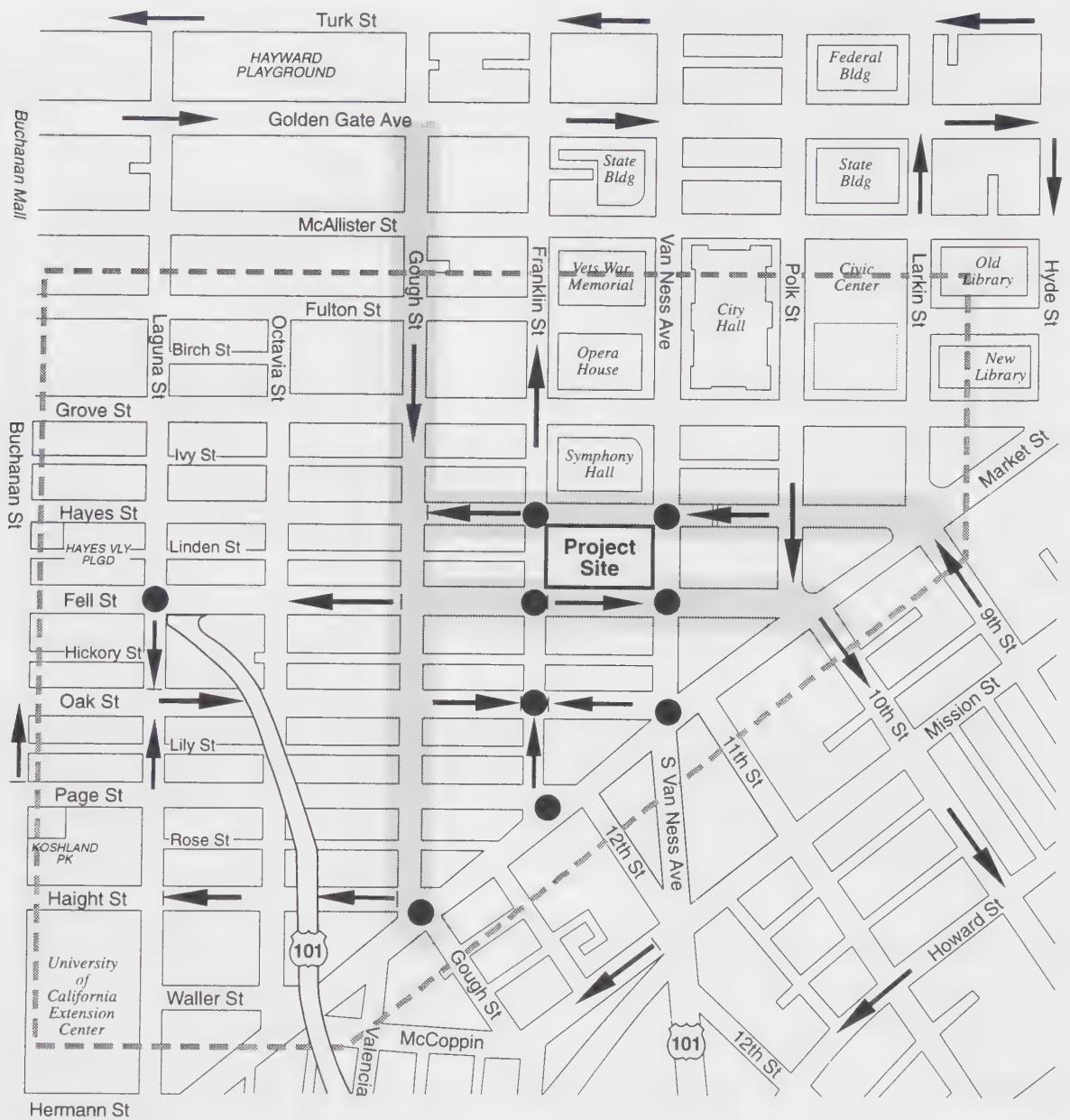
Mitigation Measure C1: None required.

Impact C2: Under cumulative conditions with the project, six of the eight study intersections would continue to operate at acceptable levels of service. The Van Ness Avenue/Fell Street and Laguna Street/U.S. 101 Off-Ramp intersections would operate at LOS F. This would not be a significant project-generated impact.

Cumulative growth forecasts to 2010 were based on a one percent compound annual growth rate (or 14.9 percent over 14 years) for weekday AM peak hour conditions. The Van Ness Avenue/Fell Street would continue to operate at LOS F (with or without the addition of project-related traffic) and the Laguna Street/U.S. 101 Off-Ramp intersection would deteriorate from LOS D to LOS F as a result of cumulative increases in traffic. Although the proposed project would contribute to these unacceptable service levels, project-generated traffic alone would not cause the deterioration in LOS.

Mitigation Measure C2: None required.

Arterials. The results of an arterial analysis of Fell Street (between Gough Street and Market Street (eastbound)), Gough Street (between Golden Gate Avenue and Market Street



LEGEND

- Study arterial segments
- Study intersections
- Direction of one-way flow
- Study area boundary



Source: Korve Engineering

TRAFFIC STUDY INTERSECTIONS AND ARTERIALS **FIGURE 23**

Table 4

INTERSECTION LEVEL OF SERVICE
FUTURE (YEAR 2010) CUMULATIVE (INCL. PROJECT) CONDITIONS - WEEKDAY AM PEAK HOUR

INT. NO.	INTERSECTION	EXISTING		EXISTING PLUS PROJECT		YEAR 2010 CUMULATIVE	
		LOS*	DELAY (secs/veh)	LOS*	DELAY (secs/veh)	LOS*	DELAY (secs/veh)
1	Van Ness Avenue/Hayes Street	B	9.3	B	11.1	B	11.0
2	Van Ness Avenue/Fell Street	F	*	F	*	F	*
3	Van Ness Avenue/Market Street	C	17.0	C	19.2	D	30.5
4	Franklin Street/Hayes Street	B	8.4	B	9.2	B	9.4
5	Franklin Street/Fell Street	B	6.9	B	8.2	B	9.0
6	Franklin Street/Market Street	C	15.8	C	16.3	C	23.9
7	Gough Street/Market Street	B	12.1	B	12.1	B	12.8
8	Laguna Street/U.S. 101 off-ramp	D	31.5	D	31.1	F	*

Notes: * - Level of Service determined from the 1985 Highway Capacity Manual (Update 1994), Chapter 9.

* - Excessive delays and congested conditions in the southbound left-turn movement from Van Ness Avenue to Fell Street.

* - Excessive delays and congested conditions in the westbound left-turn movement from Fell Street to Laguna Street.

Source: Korve Engineering

(southbound)), and Hayes Street (between Gough Street and Market Street (westbound)), are presented in Table 5, page 4-48.

Impact C3: Under cumulative conditions with the project, the arterials would continue to operate at acceptable levels of service. This would not be a significant project-generated impact.

This analysis includes weekday AM peak hour travel speeds and service levels for these segments under existing, existing-plus-project, and year-2010-cumulative conditions. Under all three scenarios, travel speeds and service levels would operate at LOS E or better, which is considered acceptable by the San Francisco Congestion Management Program (CMP).

Mitigation Measure C3: None required.

Transit.

Impact C4: Project transit trips would contribute to the demand for transit service. This impact would be less than significant.

Eighteen MUNI lines stop within two blocks of the project site. The project site is also within walking distance of the Civic Center BART Station, and stops for Golden Gate Transit and SamTrans. The proposed project would generate approximately 450 new inbound transit trips during the weekday AM peak hour. This estimated demand would be distributed among the 18 existing transit lines that serve the project area. Since most of these transit lines currently operate with excess capacity during the AM peak period, they would be able to absorb the additional transit trips (i.e., an average of 3.7 additional transit trips per line per transit vehicle).

Mitigation Measure C4: None required.

Parking.

Impact C5: The proposed project would contribute to the parking demand in the Civic Center area. This impact would be less than significant.

The parking requirement represents the amount of parking required by the City Planning Code based on proposed uses. The parking demand for the project represents the actual estimated demand generated by the project (the estimated number of vehicles that would need spaces in

Table 5
ARTERIAL LEVEL OF SERVICE
FUTURE (YEAR 2010) CUMULATIVE (INCL. PROJECT) CONDITIONS - WEEKDAY AM PEAK HOUR

ARTERIAL SEGMENT	EXISTING		EXISTING PLUS PROJECT		YEAR 2010 CUMULATIVE	
	SPEED (mph)	LOS^b	SPEED (mph)	LOS^b	SPEED (mph)	LOS^b
Fell Street, between Gough Street and Market Street (eastbound)	9.6	D	8.6	E	8.4	E
Gough Street, between Golden Gate Avenue and Market Street (southbound)	10.0	D	9.9	D	8.4	E
Hayes Street, between Gough Street and Market Street (westbound)	9.6	D	9.4	D	9.4	D

Notes: Level of Service determined from the 1985 *Highway Capacity Manual (Update 1994)*, Chapter 11.

Source: Korve Engineering

the project area during peak parking demand periods). Under City Planning Code Section 151, educational facilities are required to provide 0.5 parking spaces per classroom. The proposed project would provide approximately 50 classrooms (including art studios), resulting in a requirement of 25 parking spaces. The project would not meet this requirement, since no on-site parking spaces are being proposed.

During morning hours when students and faculty/staff would arrive at the school, it is estimated that they would generate demand for 117 and 48 long-term parking spaces, respectively, or a total of 165 spaces. It is expected that students would likely park on the street, while faculty/staff would likely park either on the street or in off-street facilities in the area. The current on-street parking occupancy of 88 percent translates into approximately 160 unoccupied spaces, of which 20 percent would be available for long-term (i.e., unrestricted) parking. Consequently, the combined parking demand for 165 long-term spaces would not be accommodated by the available on-street parking supply within the survey area. This would result in students, faculty and staff parking outside the survey area and walking longer distances, using available off-street parking, or switching to another mode of travel.

In order to estimate parking demand created by a school performance (which are currently given 4-5 times per week, usually between 7:00 p.m. and 10:00 p.m.), a parking demand rate was derived based on existing off-street public parking occupancy data, performance schedules for the Civic Center area, and theater capacity and attendance information. The weekend evening period was chosen to represent the worst-case parking conditions in the area, assuming simultaneous performances at three theaters in the area (i.e., Louise M. Davies Symphony Hall, Herbst Theater, and the War Memorial Opera House).⁸ Simultaneous performances at these venues would generate a total demand for approximately 1,700 parking spaces. Future school performances would take place at Nourse Auditorium, a facility with a 1,900 seating capacity. Based on an average attendance rate of 60 percent, an estimated 1,140 persons would attend performances at the school, generating a demand for approximately 355 off-site parking spaces. The combined demand for parking during the weekend evening period would therefore be approximately 2,055, which could be accommodated by the 2,420 parking spaces available during that time within the survey area.

Mitigation Measure C5: None required.

Improvement Measure C5: Provide information on transit, ride-sharing, car-pooling and other possible alternatives to private automobile parking.

Pedestrian Movements.

Impact C6: The proposed project would increase the volume of pedestrians at the crosswalks. This impact would be less than significant.

Based on the results of the student survey, approximately 51 percent would take transit to the project site. It is anticipated that most of these students would alight and board transit vehicles at the Van Ness Avenue/Market Street intersection. Since the main entrance to the school would be located at Fell Street (between Van Ness Avenue and Franklin Street), the project would add pedestrian traffic to the crosswalks at Van Ness Avenue/Market Street and Van Ness Avenue/Fell Street. Designated crosswalks are located on all four approaches at both intersections, thus providing safe and convenient pedestrian access to and from the project site. The existing sidewalk would accommodate SOTA generated pedestrian traffic without creating crowded conditions.

Mitigation Measure C6: None required.

Improvement Measure C6: Provide passenger loading zones for SOTA related activities.

Loading Activity.

The City Planning Code requires that the project provide one loading space. This requirement would be met by the provision of a loading facility accessible via Franklin Street. The estimated demand for delivery/service to the project would be about 15 trips per day, which corresponds to a loading demand for 0.85 spaces during a peak hour, or 0.68 spaces during an average hour. Delivery vehicles would consist primarily of step-vans and small trucks.

Demolition, Excavation, and Construction.

Impact C7: Project construction traffic would cause potential truck queuing and lane closures, and could have an impact on peak hour conditions on

adjacent streets in the project area. This impact would be significant, but would be mitigated to a less than significant level by Mitigation Measure C7.

Temporary construction-related transportation impacts would result from construction employees and truck movements to and from the site during demolition, excavation, site preparation and building activities. Total construction would require about 18 to 22 months to complete: approximately three months for demolition, three months for foundation, three months for superstructure construction, and a combined 9 to 13 months for all other work including interior rehabilitation and finishing.

During project construction, pedestrian circulation around the site on Van Ness Avenue, Hayes Street, Fell Street and Franklin Street would be maintained. Construction staging for the project would occur on site in the interior parking courtyard, and along Fell and Franklin Streets. The storage of construction materials would occupy a portion of these sidewalks, and temporary pedestrian walkways would be installed along curb lanes. Should scaffolding be required for repair of architectural ornaments on the 135 Van Ness Avenue building, temporary pedestrian walkways would be covered along Van Ness Avenue and Hayes Street to protect passers-by from falling materials.

During the excavation/foundation phase, it is estimated that there would be one flatbed truck delivery each week for rebar. Temporary closure of a traffic lane on Fell Street may be required to accommodate these flatbed trucks. During the superstructure phase, wide-load steel deliveries would occur about once a week for a one-month period. During these deliveries, temporary closure of a traffic lane on Fell Street or Franklin Street or Hayes Street would be required.

During the construction period, there would be an average of 10 to 15 truck trips per day to and from the site; this number would increase or decrease depending on the phase of construction. Inbound and outbound construction trucks would use the U.S. 101 off-ramp at Fell Street to proceed to and from the project site. Any truck traffic occurring during the hours of 7:00 to 9:00 a.m. and 3:30 to 6:00 p.m. would coincide with peak-hour traffic and could impede traffic flow. Blockage during times of peak traffic flow would have greater potential to create conflicts than

during non-peak hours because of the greater number of vehicles on the streets during the peak hour that would have to maneuver around the queued trucks.

Mitigation Improvement Measure C7: The project sponsor would direct its contractor to limit truck traffic to avoid peak periods between 7:00 a.m. and 9:00 a.m. or between 3:30 p.m. and 6:00 p.m. to the maximum extent feasible in order to minimize peak period traffic conflicts. The project sponsor and construction contractor(s) would meet with the Traffic Engineering Division of the Department of Parking and Traffic, the Fire Department, MUNI, and the Department of Public Works to determine feasible traffic mitigation measures to reduce traffic congestion, including transit disruption (for example, potential relocation of bus stops), and pedestrian circulation impacts during construction of the project. In order to minimize traffic conflicts, the contractor would be required to use a flagperson on an as-needed basis to direct traffic during construction.

Significance After Mitigation: *Less than significant.*

Impact C8: There would be a temporary parking demand created by construction workers. This impact would be potentially significant, but would be mitigated to a less-than-significant level by Mitigation Measure C8.

There would be an average of 80 construction workers on site, with increases to 160 or more during the final stages of construction.

Mitigation Measure C8: The contractor would make parking arrangements with an off-site parking facility in the area and, if necessary, the contractor would arrange to have the construction workers shuttled to the construction site.

Significance After Mitigation: *Less than significant.*

NOTES - Transportation

¹ Information on transportation was based on *San Francisco School of the Arts Transportation Study*, by Korve Engineering, September 1996. This report is on file and available for public review at the SFUSD Facilities Planning and Construction Department at 1551 Newcomb Avenue, San Francisco.

² San Francisco General Plan, Transportation Element, amended July 1995, page I.4.16.

³ A Transit Center is a major transfer point where travelers should be able to travel in many directions from this point.

- ⁴ The survey was conducted by Kove Engineering on Wednesday, June 12, 1996 for weekday midday (1:00 p.m. to 3:00 p.m.) conditions, and Saturday, June 29, 1996 for weekend evening (8:00 p.m. to 10:00 p.m.) conditions, since these times represent the greatest parking demand for land uses in the area.
- ⁵ *Alternatives to the Replacement of the Embarcadero Freeway and the Terminal Separator Structure DEIS/DEIR*, 92.202E and 94.060E, published August 25, 1995.
- ⁶ Memorandum to file *Updated Future Land Use Data Sensitivity Analysis*, April 24, 1994 conducted for the *Alternatives to Replacement of the Embarcadero Freeway and the Terminal Separator Structure EIS/EIR*
- ⁷ The transportation study was completed in November 1996. Although traffic conditions in the project area have changed (e.g., the Fell Street off-ramp was reopened on April 12, 1997), the traffic study examined both conditions. The changes to the Fell and Oak Street ramps have not had a significant difference in the LOS at the study intersections. Memo to During Associates from Kove Engineering, July 17, 1997. This memo is on file for public review at the SFUSD Facilities Planning and Construction Department at 1551 Newcomb Avenue, San Francisco.
- ⁸ Existing off-street data collected during the weekend evening survey showed a total of 751 vehicles occupying survey area parking facilities. During the evening of the survey, the only evening performance occurred at Louise M. Davies Symphony Hall (2,743-seat capacity) with an attendance of 2,420 (an 88 percent attendance rate). Based on these figures, a parking demand rate of 0.31 parking spaces per attendee was derived.

D. AIR QUALITY

SETTING

The Bay Area Air Quality Management District (BAAQMD) operates a regional monitoring network which measures the ambient concentrations of six air pollutants (the "criteria pollutants"): ozone(O_3), carbon monoxide (CO), fine particulate matter (PM_{10}), lead (Pb), nitrogen dioxide (NO_2) and sulfur dioxide (SO_2). On the basis of the monitoring data, the Bay Area, had been designated a "non-attainment" area with respect to the Federal O_3 and CO standards. The Bay Area recently was recently redesignated by the U.S. Environmental Protection Agency a "maintenance area" for ozone, while a request for redesignation to "maintenance area" for CO has been submitted to the U. S. Environmental Protection Agency. The air basin is an attainment area or is unclassified for all other national ambient air quality standards. In addition, San Francisco has experienced violations of the state 8-hour CO and PM_{10} standards. A four-year summary of data collected at the BAAQMD monitoring station at 10 Arkansas Street (a few miles southeast of the project site) is shown in Appendix D, together with the most stringent corresponding state and/or federal ambient air quality standards in San Francisco. From 1991 to 1994, there were no violations of either the one-hour or eight-hour CO standards, or the

standards for ozone, nitrogen dioxide, sulfur dioxide or lead. The state PM₁₀ standard was exceeded on between 9 and 15 days each year during the four year period of 1991-1994.

Comparison of these data with those from other BAAQMD monitoring sites indicates that San Francisco's air quality is among the least degraded of all urbanized portions of the Bay Area. Three of the prevailing winds, west, northwest, and west-northwest, blowing off the Pacific Ocean, reduce the potential for San Francisco to receive air pollutants from elsewhere in the region.

Data from air quality monitoring in San Francisco show that there have been violations of the state (but not federal) fine particulate standards. Prior to 1989, occasional violations of the state/federal 8-hour standard for carbon monoxide were also recorded annually. CO is a non-reactive air pollutant, the major source of which is motor vehicles. CO concentrations are generally highest during periods of peak traffic congestion. Particulate levels are relatively low near the coast and increase with distance from the coast peaking in dry, sheltered valleys. The primary sources of particulates in San Francisco are construction and demolition, combustion of fuels for heating, and vehicle travel over paved roads.¹

San Francisco, like all other sub-regions in the Bay Area, contributes to regional air quality problems, primarily O₃, in other parts of the Bay Area. Ozone is not emitted directly from air pollutant sources, but is produced in the atmosphere over time and distance through a complex series of photochemical reactions involving hydrocarbons (HC) and nitrogen oxides (NO_x), which are carried downwind as the photochemical reactions occur. Ozone standards are violated most often in the Santa Clara, Livermore and Diablo Valleys, because local topography and meteorological conditions favor the build-up of ozone precursors there.

In 1995, emissions from motor vehicles were the source of 70 percent of the CO, 41 percent of the HCs, 72 percent of the PM₁₀, 89 percent of the sulfur oxides and 53 percent of the NO_x emitted in San Francisco.²

The federal Clean Air Act and the California Clean Air Act of 1988 require that the State Air Resources Board, based on air quality monitoring data, designate portions of the state where

the federal or state ambient air quality standards are not met as "non-attainment areas." Because of the differences between the national and state standards, the designation of nonattainment areas is different under the federal and state legislation.

Under the California Clean Air Act the entire San Francisco Bay Air Basin is a nonattainment area for ozone and PM₁₀. The air basin is either attainment or unclassified for other pollutants.

The Bay Area has both a federal and state air quality plan. Both plans propose the imposition of controls on stationary sources (factories, power plants, industrial sources, etc.) and Transportation Control Measures designed to reduce emissions from automobiles.

IMPACTS AND MITIGATION MEASURES

According to Appendix G of the CEQA Guidelines, a project would be considered to have a significant adverse impact on the environment if it would "violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations." A project would also have a significant impact on air quality if it would conflict with any established plans, policies, or regulations regarding air quality.

Air quality impacts from a project result from project construction and operation. Construction emissions, primarily dust generated by earthmoving activities and criteria air pollutants emitted by construction vehicles, would have a short-term effect on air quality. Operational emissions, generated by project-related traffic and by combustion of natural gas for building space and water heating, would continue to affect air quality throughout the lifetime of the project.

The analysis in this section provides information that could be used to assess the project in relation to thresholds of significance recommended by the Bay Area Air Quality Management District's *BAAQMD CEQA Guidelines*. For regional air quality, a significant impact is defined as an increase in emissions of an ozone precursor or PM₁₀ exceeding the Bay Area Air Quality Management District's recommended thresholds of significance. The District considers an increase of 80 pounds per day for ozone precursors or PM₁₀ to represent a significant adverse impact.³

The District also has a threshold of significance for carbon monoxide of 550 pounds per day. Exceeding this threshold is not in itself considered a significant impact, but would trigger the need for localized carbon monoxide modeling.

Construction Emissions

Impact D1: Fugitive dust generated by construction and demolition activities would contribute to PM₁₀ concentrations that could violate State PM₁₀ standards. This impact could be potentially significant and intermittent.

Construction activities such as demolition, excavation and grading operations, construction vehicle traffic and wind blowing over exposed earth would generate exhaust emissions and fugitive particulate matter emissions that would temporarily affect local air quality. Construction activities would not involve burning of any materials and would not create objectionable odors. Grading and other construction activities would temporarily affect local air quality for a period of months, causing a temporary increase in particulate dust and other pollutants. Dust emission during excavation would increase particulate concentrations near the site. Under high winds, exceeding 12 miles per hour, localized effects including human discomfort might occur downwind from blowing dust. Construction dust is composed largely of large particles that settle out of the atmosphere more rapidly with increasing distance from the source. More of a nuisance than a hazard for most people, this dust could affect persons with respiratory diseases, as well as sensitive electronic or communications equipment.

Mitigation Measure D1: The project sponsor would require the contractor to wet down the site during demolition and construction at least twice a day during construction to reduce particulate by at least 50 percent, would require covering soil, sand and other fine material, and would require street sweeping around the construction site at least once per day.

Significance After Mitigation: *Less than significant.*

Operations Emissions

Impact D2: The project would increase emissions of criteria pollutants from increased operation of stationary sources and increased vehicular traffic to and from the project site. The impacts would be less than significant.

Upon completion, project operation would affect local air quality by increasing the number of vehicles on project-impacted roads and at the project site, and by introducing stationary emissions to the project site. Transportation sources would account for over 90 percent of operational project-related emissions. Stationary source emissions, generated by combustion of natural gas for building space and water heating, would be less than significant.

Local Impacts

On the local scale, the project would change traffic on the local street network, changing carbon monoxide levels along roadways used by project traffic. Carbon monoxide is an odorless, colorless poisonous gas whose primary source in the Bay Area is automobiles. Concentrations of this gas are highest near intersections of major roads.

The Bay Area Air Quality Management District has identified three criterion that would require the estimation of local carbon monoxide concentrations:

- Project vehicle emissions would exceed 550 pounds per day
- Project traffic would impact intersections or roadway links operating at Level of Service D, E or F or would cause LOS to decline to D, E or F; or
- Project traffic would increase traffic volumes on nearby roadways by 10 percent or more.

The URBEMIS-5 computer program was applied to project daily trip generation under winter conditions to estimate total project-related carbon monoxide emissions. The resulting emission of 257 pounds/day of carbon monoxide is below the BAAQMD threshold of significance of 550 pounds/day. Project traffic would, however, impact two intersections currently operating at LOS D, E or F.

Table 6, page 58, shows predicted 1-hour and 8-hour averaged carbon monoxide concentrations at the two intersections that meet the BAAQMD criteria for modeling. Project traffic would increase concentrations by no more than 0.1 Parts Per Million (PPM) for either intersection. Concentrations are below the applicable state/federal standards, so project impacts on local carbon monoxide concentrations would be less than significant.

Table 6
EXISTING AND PROJECTED CURBSIDE CARBON MONOXIDE
CONCENTRATIONS AT SELECTED INTERSECTIONS*

Intersection	Without Project (1996)		With Project (1996)	
	1-Hour	8-Hour	1-Hour	8-Hour
Van Ness Avenue/Fell Street	10.3	7.0	10.4	7.0
Laguna/Fell/U.S. 101 Off-ramp	10.5	7.1	10.5	7.1
Most Stringent Standard	20.0	9.0	20.0	9.0

* Calculations were made using a revised version of the Modified Linear Rollback (MLR) method described in the *Downtown Plan EIR*, EE81.3, certified October 18, 1984, Appendix O. Background concentrations of 7.8 PPM (1-hour) and 5.2 PPM (8-hour) were calculated using 1992 isopleths of carbon monoxide concentration and rollback factors developed by the Bay Area Air Quality Management District. The one-hour State standard is 20 PPM, the one-hour federal standard is 35 PPM, and the eight-hour State and federal standards are 9 PPM. Emission factors were derived from the California Air Resources Board EMFAC7F computer model (Version 1.1).

Source: Don Ballanti, Certified Consulting Meteorologist

Regional Impacts

Project traffic would also have an effect on air quality outside the project vicinity. Trips to and from the project would result in air pollutant emissions over the entire Bay Area. To evaluate emissions associated with the project, the URBEMIS-5 computer program, developed by the California Air Resources Board, was employed.

The daily increases in regional emissions from auto travel is shown in Table 7, page 4-59, for reactive hydrocarbons and oxides of nitrogen (two precursors of ozone), carbon monoxide and PM₁₀ (particulate matter, 10 micron).

Guidelines for the evaluation of project impacts issued by the Bay Area Air Quality Management District consider emission increases to be significant if the project emissions exceed 80 lbs per day for regional pollutants (HC, NO_x, PM₁₀). Project emissions shown in Table 7 are below these criteria for those pollutants, so the proposed project would have a less than significant impact on regional air quality.

Table 7
PROJECT REGIONAL EMISSIONS IN POUNDS PER DAY*

	Reactive Hydrocarbons	Nitrogen Oxides	Carbon Monoxide	PM-10
Project Daily Emission	20.0	18.9	256.7	15.5
BAAQMD Threshold	80.0	80.0	550.0	80.0

- * Estimates of regional emissions generated by project traffic were made using a program called URBEMIS-5. Inputs to the URBEMIS-5 program include trip generation rates, vehicle mix, average trip length by trip type and average speed. Trip generation rates for project land uses were provided by the project transportation consultant. Average trip lengths and vehicle mixes for the Bay Area were used. Average speed for all types of trips was assumed to be 25 MPH. The analysis assumed a 1996 vehicle mix. The URBEMIS-5 runs assumed summertime conditions for ROG, NOX and PM-10. Wintertime conditions were assumed to for URBEMIS-5 runs to calculated CO emissions. Road dust emissions were calculated based on an emission rate of 0.69 grams/VMT were added to the URBEMIS-5 exhaust emissions.

Source: Don Ballanti, Certified Consulting Meteorologist.

Mitigation Measure D2: None required.

Notes - Air Quality

¹ Bay Area Air Quality Management District, *BAAQMD CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans*, April 1996.

² Ibid.

³ Ibid.

E. NOISE

SETTING

Ambient noise in the project vicinity is typical of noise levels in downtown San Francisco, which are dominated by vehicular traffic, including trucks, cars, MUNI buses and emergency vehicles. The nearest off-site noise sensitive receptors are multi-family residences located on the south side of Hayes Street.

Sidewalk noise measurements were taken to quantify the existing noise environment at the project site along Hayes and Fell Streets and Van Ness Avenue.¹ Table 8, page 60, shows the results of the noise measurements.

The highest noise levels exist on Van Ness Avenue. An average noise level of 73.7 DBA was measured.² Maximum noise levels generated by trucks and buses reach 81 DBA. The background noise level at this location was 68 DBA. Noise levels greater than 60 DBA can interfere with normal speech and concentration. Noise levels greater than 70 DBA would require office workers to close windows or shout to communicate. General stress reaction has been observed in humans exposed to brief sounds of 75 dba.³ At noise levels of 85 DBA, normal conversation is extremely difficult, and sleep or rest virtually impossible. High noise levels can also lead to physiological effects, such as elevated blood pressure.⁴

Table 8
NOISE MEASUREMENTS

Site	Day & Time	L_{eq}	L_{01}	L_{10}	L_{50}	L_{90}	Comments
1. Mid-block of Van Ness Avenue between Hayes Street and Fell Street	Tuesday 9/24/96 12:19 pm - 12:34 pm	73.7	81	76	72	68	Heavy traffic on Van Ness Avenue - trucks, buses, cars
2. Mid-block of Hayes Street between Van Ness Avenue and Franklin Street	Tuesday 9/24/96 11:45 am - 12:00 pm	68.5	73	72	67	62	Traffic on Hayes Street
3. Mid-block of Fell Street between Van Ness Avenue and Franklin Street	Tuesday 9/24/96 12:54 pm - 1:00 pm	69.0	76	71	68	64	Traffic on Fell Street

Source: Illingworth & Rodkin

Noise levels are lower on Hayes Street and Fell Street. The noise environment on both streets are similar. The average noise level along Hayes Street was 68.5 DBA with maximum levels reaching 74 DBA. The background noise level was 62 DBA. The average noise level on Fell Street was 69 DBA with maximum noise levels of up to 78 DBA. The background noise level was 62 DBA.

IMPACTS AND MITIGATION MEASURES

CEQA Guidelines Appendix G state that a project would normally have a significant adverse impact on the environment if it would increase substantially the ambient noise levels of adjoining areas. A change in noise levels of less than three DBA is not discernible to the general population; an increase in average noise levels of from three to five DBA is clearly discernible to most people.⁵ An increase in the noise environment of five DBA or greater is considered to be the minimum required increase for a change in community reaction⁶ and, for purposes of this analysis, constitutes a significant noise impact. A project would also be considered to have a significant noise impact if it would result in a noise level greater than that specified for educational uses in a classroom in the *State Standards for School Structures*.

Impact E1: The ambient noise levels from existing and projected traffic adjacent to the project would exceed the standards for noise levels in classrooms. This would be a significant impact that would be mitigated to a less-than-significant level by Mitigation Measure E1.

The measured daytime noise levels at the site were compared to continuous 24-hour noise measurements conducted at other locations along Van Ness Avenue. As shown in Table 8, these data indicate that typically the L_{dn} value is about three decibels higher than the daytime average noise level. This means that the L_{dn} along the Van Ness Avenue frontage is about 77 DBA and the L_{dn} along the Hayes, Fell Street frontages is about 72 DBA. A noise exposure similar to Hayes and Fell Street frontages would be expected along Franklin Street based on the existing traffic volumes and speed.

An evaluation of the existing building facade was conducted to determine whether noise levels inside the building would be appropriate for the proposed uses, and if not, what treatments to the building would be necessary to allow acceptable noise levels to occur.⁷ The study found that, even with the windows closed, noise levels indoors would be inappropriate for classroom, office and performing arts activities. The existing daytime average indoor noise level in these rooms is about 49 DBA with a maximum of 61 DBA when windows are open. This average level is about nine decibels higher than would be considered acceptable for office and classroom uses and 10 to 20 decibels higher than would be considered acceptable for performing arts and music practice spaces.

Mitigation Measure E1: To provide for an acceptable interior noise environment, the 135 Van Ness Avenue building would be mechanically ventilated to allow the windows to remain closed for noise control.

Significance After Mitigation: *Less than significant.*

Mitigation Measure E2: The windows in the 135 Van Ness Avenue building could be replaced with sound-rated windows with Sound Transmission Class (STC⁸) ratings ranging from 42 to 48 Db, depending upon the space. The STC 42 window could be used in the majority of the building and the STC 48 window could be used for critical spaces (eg., performing arts and music practice spaces).

Significance After Mitigation: *Less than significant*

NOTES - Noise

- ¹ Illingworth & Rodkin, Inc., Acoustical Engineers, *San Francisco Unified School District School of the Arts Adaptive Re-Use Project EIR, Noise Section*, September 30, 1996. This report is available for public review in the project case file at SFUSD Facilities Planning and Construction Department at 1551 Newcomb Avenue, San Francisco.
- ² DBA is a measure of sound in units of decibels (Db). The "A" denotes the A-weighted scale, which simulates the response of the human ear to various frequencies of sound.
- ³ The Central Institute for the Deaf, *Effects of Noise on People*, U.S. EPA, 1971.
- ⁴ Cohen, Sheldon et al., *Cardiovascular and Behavioral Effects of Community Noise*, American Scientist, Volume 69, October 1981.
- ⁵ Caltrans, Noise, Technical Analysis Notes, 2nd Draft, 1991.
- ⁶ U.S. Department of Transportation, Urban Mass Transportation Administration, Guidance Manual for Transportation, Noise and Vibration Impact Assessment, July 1990.
- ⁷ Illingworth and Rodkin, Inc., *Evaluation of the Facade Noise Reduction for the San Francisco Unified School District School of the Arts Adaptive Re-use Project*, dated September 27, 1996. This report is on file for public review at the SFUSD Facilities Planning and Construction Department at 1551 Newcomb Avenue, San Francisco.
- ⁸ STC (Sound Transmission Class) -- A single figure rating designed to give an estimate of the sound insulation properties of a partition. Numerically, STC represents the number of decibels of speech sound reduction from one side of the partition to the other. The STC is intended for use when speech and office noise constitute the principal noise problem. A STC 42 window could reduce noise to about 35 DBA or less, and a STC 48 window could reduce levels to a 30 - 35 DBA range.

5. IMPACT OVERVIEW

A. SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

In accordance with Section 21067 of the California Environmental Quality Act (CEQA), and with Sections 15040, 15081, and 15082 of the State CEQA Guidelines, the purpose of this chapter is to identify impacts that could not be eliminated or reduced to an insignificant level by mitigation measures included as part of the proposed project, or by other mitigation measures that could be implemented, as described in Chapter 4, Environmental Setting, Impacts and Mitigation Measures.

This chapter is subject to final determination by the San Francisco Unified School District Board of Education as part of its certification process for the EIR. The Final EIR will be revised, if necessary, to reflect the findings of the Board.

The Newton J. Tharp Commercial High School building at 170 Fell Street has been evaluated by the State Office of Historic Preservation Office (SOHP). It has been determined that the building may become eligible for separate listing in the National Register of Historic Places. The proposed demolition of the 170 Fell Street Buildings, would have a potential unavoidable significant adverse impact on the historic resources of the project site.

B. GROWTH INDUCEMENT

The proposed relocation and expansion of the School of the Arts would change and intensify the use at the former High School of Commerce. The San Francisco Unified School District administrative offices would be relocated, and the new SOTA complex would provide an expanded capacity for up to a maximum of 1,000 students and faculty.

Net new employment as a result of the project could total about 30 or 40 jobs (many of the faculty would be part-time artists-in-residence many of whom would be affiliated with the

performing arts institutions in the Civic Center such as the San Francisco Ballet, Symphony and Opera). Not all of these jobs would be new to San Francisco. The extent that net new employment in the Civic Center would be net new employment in San Francisco would depend on the faculty positions that could be filled by people relocating to the area, expected to be less than ten openings.

The project consists of uses expanding and relocating from other San Francisco locations, rather than new development in the City. The increase in employment at the project site would not, therefore, necessarily represent employment that is new to San Francisco. It is expected that most of the new employees and student-body would live in San Francisco. Employment growth, however, would not be reflected directly in increased demand for housing and city services to residents, as some new jobs would be held by individuals who already live and work in the City; who live in the City but previously worked outside the City or did not work; or who live outside the City. Project employment would incrementally increase housing demand in San Francisco and other parts of the Bay Area.

The project would be built in a developed urban area, and no expansion to the municipal infrastructure not already under consideration would be required to accommodate new development due to, or induced by, the project.

6. ALTERNATIVES TO THE PROPOSED PROJECT

In accordance with the *CEQA Guidelines* (*Section 15126[d]*), an EIR must describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project. The discussion must also evaluate the comparative merits of the alternatives. The following section identifies three alternatives to the proposed project, including a “no project” alternative and two alternatives which would include the historic preservation and adaptive reuse of the 170 Fell Street building.

The *CEQA Guidelines* require that an alternative that would be environmentally superior to the proposed project be identified in the EIR. If the alternative with the least environmental impact is the “no project” alternative, then one of the other remaining alternatives must be designated as the environmentally superior alternative. In this case, the environmentally superior alternative is Alternative B.

A. ALTERNATIVE A: NO PROJECT

DESCRIPTION

CEQA requires that EIRs consider a “no project” alternative. CEQA Guidelines section 15126 was amended in 1994, requiring that the No Project Alternative analysis discuss a No Build Variant and the Existing Development Potential Variant. Under the No Build Variant, the existing buildings would be retained in their present condition. The 170 Fell Street Building would not be demolished or repaired. The 135 Van Ness Avenue Building would not be repaired. Both the 170 Fell Street Building and the Gymnasium Wing of the 135 Van Ness Avenue Building would remain damaged, uninhabitable, vacant and left in a state of disrepair. Existing conditions at the site would continue, as generally described in the Setting sections of this EIR: the School of the Arts (SOTA) would not relocate to the site but would continue to occupy a surplus elementary school on Font Street adjacent to San Francisco State University; District

administrative staff would continue to occupy the 135 Van Ness Avenue building; and severe structural damage of the 135 Van Ness Avenue gymnasium and the 170 Fell Street building would not be repaired (the structures would remain unoccupied for safety reasons).

Under the Existing Development Potential Variant, the analysis should discuss reasonably foreseeable future development if the project were not approved, based on current plans and consistent with available infrastructure and community services. Under this variant, the existing buildings would be repaired and would be used for school purposes as described in Alternative B, Variant 1, or continued to be used for administrative offices by the SFUSD.

ENVIRONMENTAL IMPACTS

If the No Build Variant were implemented, none of the impacts associated with the proposed project would occur. In general, the environmental characteristics of the project site would remain as described in the Setting sections of this report (see Chapter 4, Environmental Setting, Impacts and Mitigation Measures, for a discussion of the existing conditions).

Under the No Build Variant, the 170 Fell Street building would not be demolished, and no significant impacts to historic architectural resources would occur. The No Build Variant, however, would not provide the structural improvements needed to make the building habitable, nor would it preclude its future preservation or demolition. The deterioration of terra cotta tiles and other historic building materials would continue in the absence of a maintenance or restoration program. The North Wing (gymnasium) of the 135 Van Ness Avenue Building would remain inhabitable and its damages unrepaired.

With the No Build Variant, transportation, noise and air quality impacts associated with demolition, excavation and construction of the proposed project would not occur; cumulative construction-related impacts of other projects in the Civic Center area, to which the proposed project would have contributed, would continue.

Transportation, parking and air quality conditions (as described in Chapter 4, Environmental Setting, Impacts and Mitigation) as base conditions with cumulative development, would continue to exist around the site. There would be no change in energy demand on the site. Daily population on the site would not increase. The visual quality characteristics of the site would

remain as they currently appear. The existing landscaping would remain, and those trees and shrubs that are sickly and in need of treatment, including removal, would still be present.

The impacts of the existing development potential variant would be similar to Alternative B, Variant 1. See pages 6-11 to 6-12 for a discussion of the environmental impacts of this variant of the No Project Alternative.

REASONS FOR REJECTING ALTERNATIVE

The project sponsor rejects the No Project Alternative for the following reasons:

- This alternative would not allow the relocation of the existing School of the Arts from its temporary quarters -- a converted grammar school -- to a facility designed to fit the special programmatic needs of SOTA.
- This alternative would preclude the SFUSD from returning the existing SOTA campus at Font Street, originally designed for a grammar school, for use by grades K through 8. Converting the existing SOTA campus for grades K through 8 is an important element of the SFUSD's plan to participate in a state funded program, which aims to reduce class sizes. At this time, even with the use of portable classrooms, SFUSD is having difficulty meeting the program schedule size, in part because of the lengthy wait for portable classrooms. In order to comply with the class reduction program, provision of additional classrooms within an existing campus would entail the conversion of other needed school facilities, such as decreasing the area devoted to library, gymnasium, or outdoor play areas.
- The damaged 170 Fell Street Building and the Gymnasium Wing of the 135 Van Ness Avenue Building would remain vacant, uninhabitable, and in a state of disrepair. These buildings would continue to deteriorate creating potential safety hazards to the public.
- The SFUSD's objective of providing a quality educational environment for SOTA in a location within close proximity of the City's performing art centers would not be achieved.
- Students of SOTA would be forced to attend classes in a facility without practice rooms or other specially designed spaces.

B. ALTERNATIVE B: PRESERVATION AND ADAPTIVE REUSE OF 170 FELL STREET FOR SCHOOL USE

The principal objective of Alternative B is to retain the existing 170 Fell Street building on the project site, preserve its historic architectural integrity, and adaptively reuse the building for school purposes. This EIR examines three variants of this basic alternative. They are:

- 1) **Variant 1:** preservation and adaptive reuse of 170 Fell Street for a non-SOTA school use;
- 2) **Variant 2:** preservation and adaptive reuse of 170 Fell Street for the SOTA program components proposed for the new 170 building, with conversion of the library and gymnasium similar to the project;
- 3) **Variant 3:** preservation and adaptive reuse of 170 Fell Street for SOTA use, with conversion of the library and gymnasium, located in the north and south wings, respectively, of the 135 Van Ness Avenue building, for large-space programmatic SOTA needs.

Variant 2 and 3 were developed with the input of members of the historic preservation community, including representative of the State Office of Historic Preservation, members of the City's Landmarks Preservation Advisory Board, and other interested members from the City's historic preservation community (such as the San Francisco Foundation of Architectural Heritage) as part of the Section 106 review process. In the remainder of this chapter, these variants are referred to as Variant 1, Variant 2, or Variant 3, as appropriate. However, the reader should bear in mind that they are variants of a single alternative, Alternative B, which entails adaptive reuse of 170 Fell Street for a school use. Each of these three variants is examined separately below.

As a prelude to historic preservation, architects and engineers have developed a protocol for determining the relative significance of individual building components. Significance ratings are used to establish an understanding of the relative quality and importance of building features by designating zones according to use, original design, public access, and integrity. This protocol identifies significant interior and exterior building areas and ranks their importance.

The following description of each of the zones used in the preliminary analysis of the 170 Fell Street building applies equally to all three variants of Alternative B and to Alternative C (which is discussed further below):

Preservation Zones: Both in plan view and elevation, these are areas exhibiting unique or distinctive qualities, original materials or elements; or representing examples of skilled craftsmanship. Preservation zones may be distinguished from rehabilitation areas by concentrations of detailing or "richness" of finish material and detail. Preservation of original materials and design are given the highest priority in areas thus designated. Where elements are missing or very deteriorated or damaged, the areas should be preserved or replaced in kind. Examples of Preservation Zones at 170 Fell Street include spaces and areas representing the highest relative degree of detailing and finish level, such as the main lobby, public spaces such as corridors, and assembly spaces such as the Auditorium. The primary building facades of 170 Fell Street are also considered preservation areas.

Rehabilitation Zones: Rehabilitation Zones are areas generally of relatively less importance and less rich in materials and detailing than the primary public spaces, but which may be original and maintained at an acceptable level. These may include secondary circulation spaces, offices, classrooms, etc.; and side elevations or elevations that are less subject to public view. Areas designated as Rehabilitation Zones should be preserved wherever possible. Where rehabilitation and alteration work is required, such work should be compatible with the original area and its features.

Free Zones: Free Zones are areas not subject to the above two categories and whose modification would not represent loss of character or intrusion into an otherwise historically significant structure. Guidelines for Free Zones call for retention and restoration where there is a requirement for alteration; such work should be sensitive to the overall historic building character. Free Zones at 170 Fell Street include basement classrooms and the upper floor office conversion space.

Cost estimates were developed for the proposed project replacement building at 170 Fell Street project and the two SOTA 170 Fell Street Building Adaptive Reuse Alternatives and are shown in Table 9 below. These estimates excluded costs related to sidewalk and landscape improvements, moveable classroom/office equipment, telecommunications and other wiring and cabling, and other miscellaneous expenses. The cost estimates for the new building included the cost of demolition and asbestos abatement at 170 Fell Street.

Table 9
**COST COMPARISONS OF THE PROPOSED PROJECT REPLACEMENT BUILDING
FOR 170 FELL STREET AND THE TWO SOTA ADAPTIVE REUSE ALTERNATIVES**

PROPOSED PROJECT REPLACEMENT			VARIANT 2	VARIANT 3
Construction		\$13,554,000	\$20,810,000	\$20,016,000
Haz Mat		\$476,000	\$711,976	\$711,976
Demo		\$758,000	\$0	\$0
Sitework at south wing		\$0	\$252,000	\$252,000
Soft Cost	20%	\$2,957,720	\$4,304,395	\$4,145,595
Total		\$17,746,320	\$26,078,371	\$25,125,571

Source: Adamson Associates
Environmental Science and Engineering, Inc.

B.1 VARIANT 1: PRESERVATION AND ADAPTIVE REUSE OF 170 FELL STREET FOR SCHOOL USE

DESCRIPTION

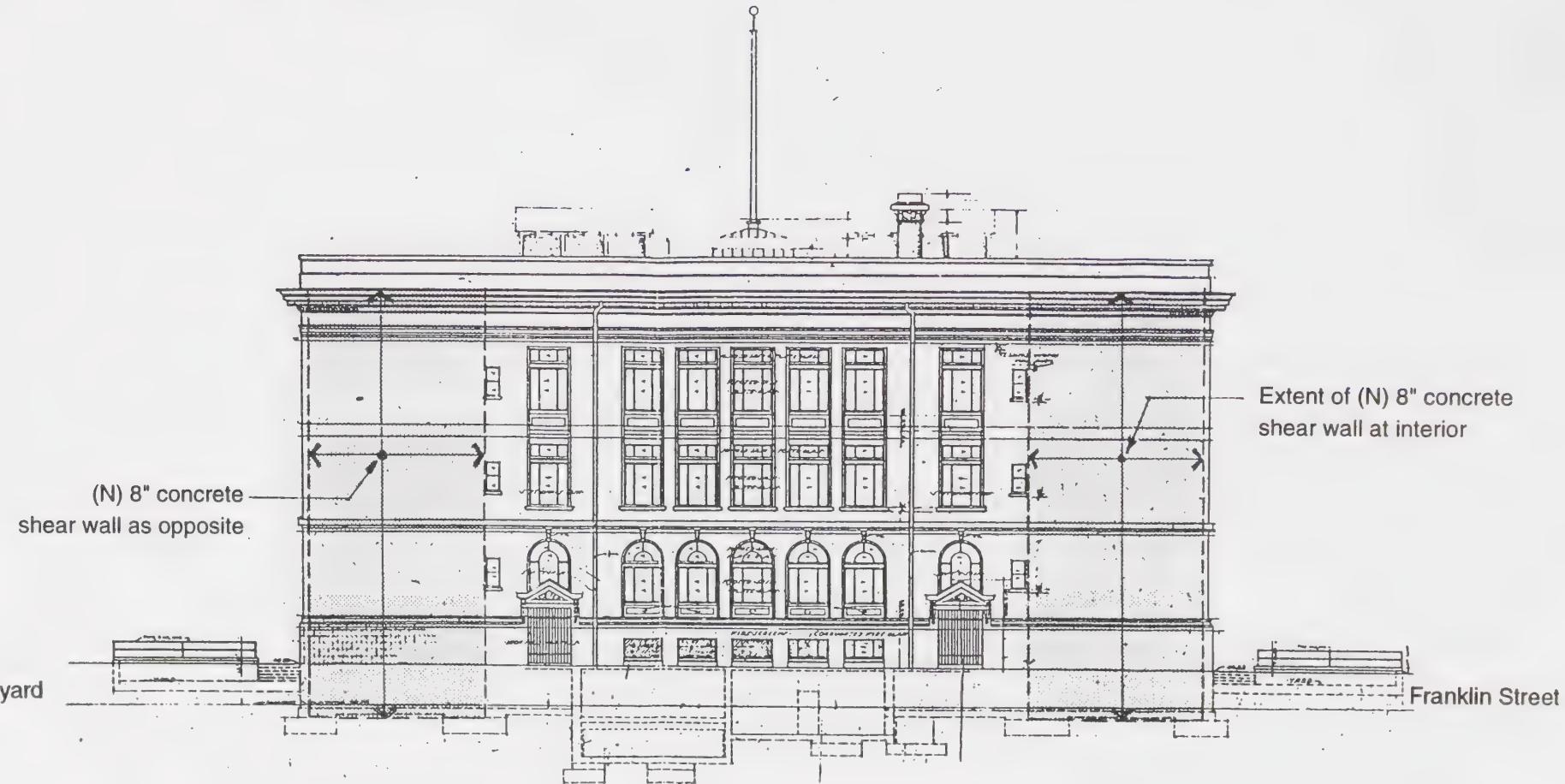
The principal objective of Variant 1 is to retain the existing 170 Fell Street building, preserve its historic architectural integrity, and adaptively reuse the building for school purposes. This variant would also entail the adaptive reuse of the 135 Van Ness Avenue and Nourse Auditorium buildings for the same school use. Under Variant 1, the SOTA would not expand or relocate, but would continue to operate at its existing size and location on Font Street, adjacent to San Francisco State University. The project site, including the 170 Fell Street building, the 135 Van Ness Avenue building, and Nourse Auditorium, would be occupied by another SFUSD school, as yet unidentified. As with the proposed project, under Variant 1 the SFUSD administrative staff which currently occupies the project site would be relocated to other District-owned or leased spaces in San Francisco. Prior to reoccupation of the site, all of the buildings would be strengthened to meet current State Building Code and seismic safety standards for schools.

Renovation and modification of 170 Fell Street would preserve key architectural features of the historic building.¹ Consequently, the building would be reconstructed similar to the original

configuration, incorporating the existing classroom and corridor layouts. The plan under this variant would thus consist of perimeter classrooms throughout the first through third floors, with a large-scale, multi-purpose space at the existing third floor hearing room location. Toilet rooms would be located where they exist today, and the existing elevator would be retrofitted. The basement would house multi-purpose, storage, and mechanical spaces.

If the existing building were to be reused for school uses, then the California Building Code (CBC) mandates increased seismic strength levels. Under Variant 1, these increased strengthening requirements would result in the addition of continuous reinforced concrete added to the interior face of the exterior masonry walls. Lateral strengthening work would also extend to the core of the building, with reinforced concrete shear walls proposed to replace walls surrounding existing toilet rooms. L-shaped reinforced concrete shear walls at the building corners would be used, and one leg of each of these corner walls would extend three vertical window bays into each end of the south elevation and at the north ends of both the east and west elevations. However, as the existing windows are three units wide, with each of the tall window units surmounted by transoms, the central three foot wide by six-and-a-half foot high window units, and the three foot wide by two foot high transoms, would remain free, while the one-and-a-half foot wide window units at each side would be blocked by the new concrete interior walls. The other leg of these L-shaped walls would correspond to the existing solid (window-less) exterior walls (Figures 24, 25, 26, and 27, pages 6-8, 6-9, 6-10 and 6-11).

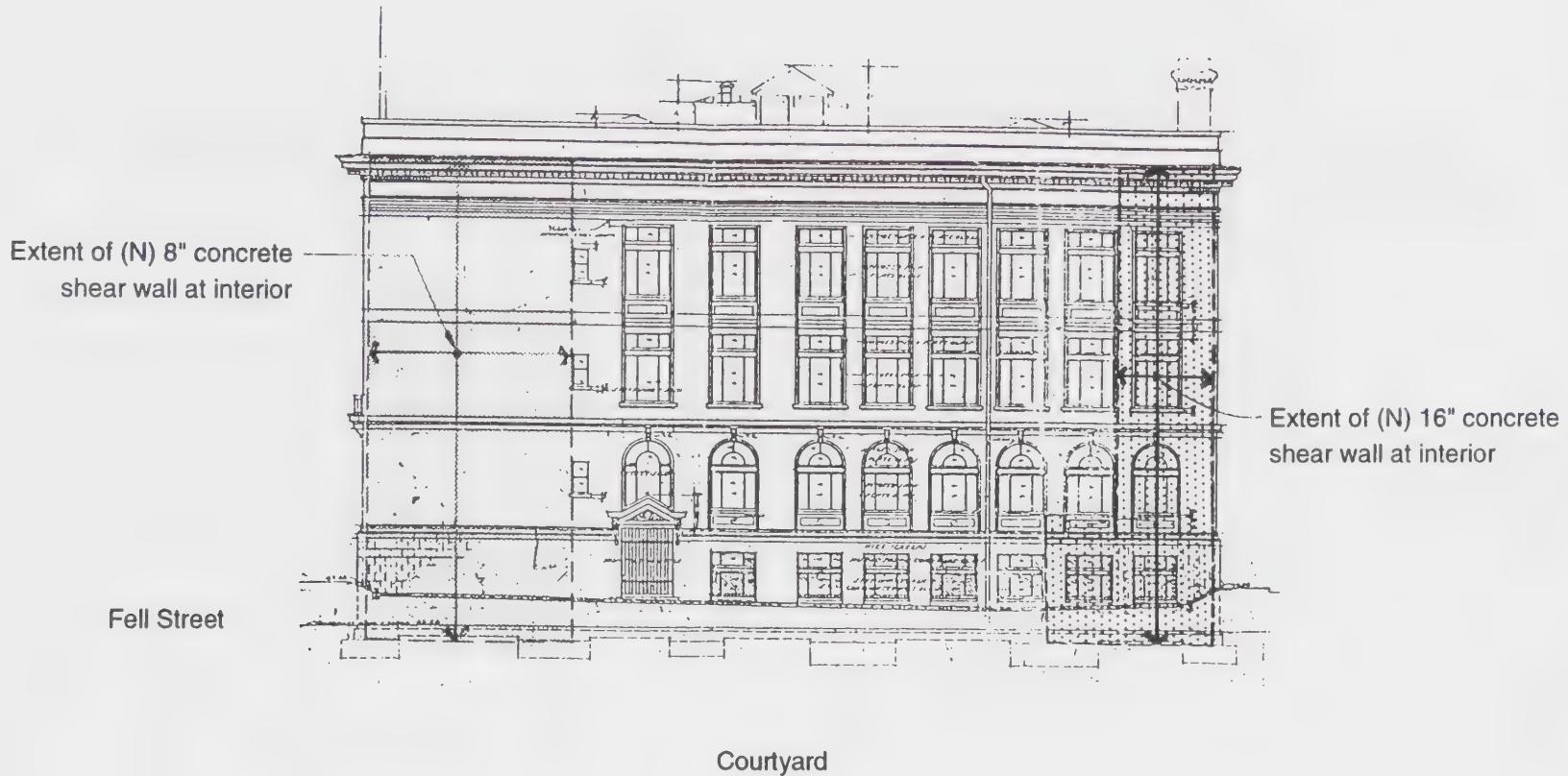
Additional reinforced concrete would fill in the central portion of each facade. This work would be required not for added lateral strength but for positive attachment of the existing brick masonry, and would thus not effect existing window openings. Since the original interior walls were constructed of hollow clay tile, all such material would be removed to meet school-related seismic and fire safety requirements. The existing building interior, with the sole exception of the stairs, would be demolished and reconstructed throughout. Appropriate seismic and structural upgrades would be performed on Nourse Auditorium and the 135 Van Ness Avenue building. Although these buildings were not as severely damaged by the Loma Prieta earthquake as the 170 Fell Street building, structural retrofits would be required to bring the buildings up to current building codes applicable to school use.



Source: Degenkolb

ALTERNATIVE B-1: NORTH ELEVATION OF 170 FELL STREET BUILDING

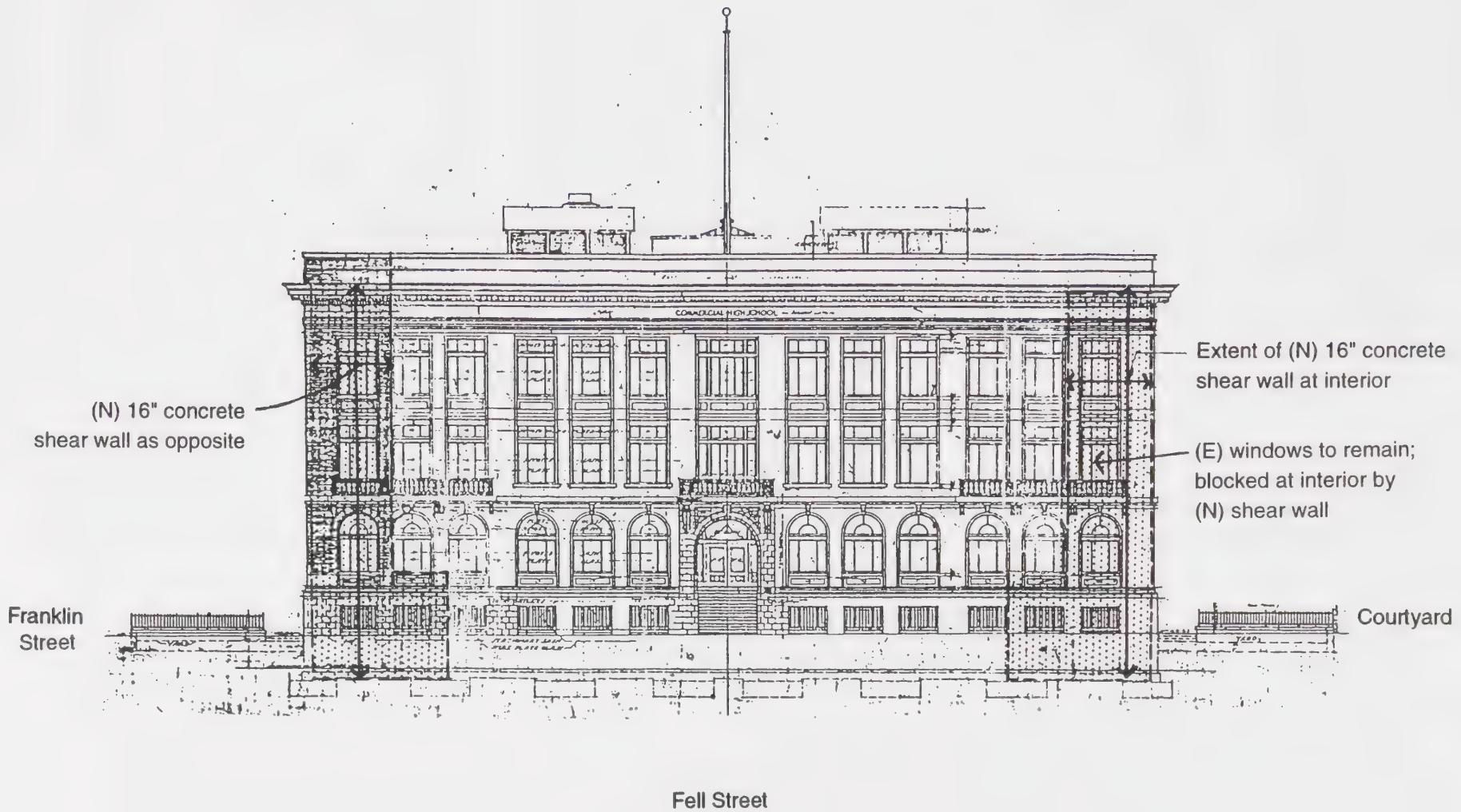
FIGURE 24



Source: Degenkolb

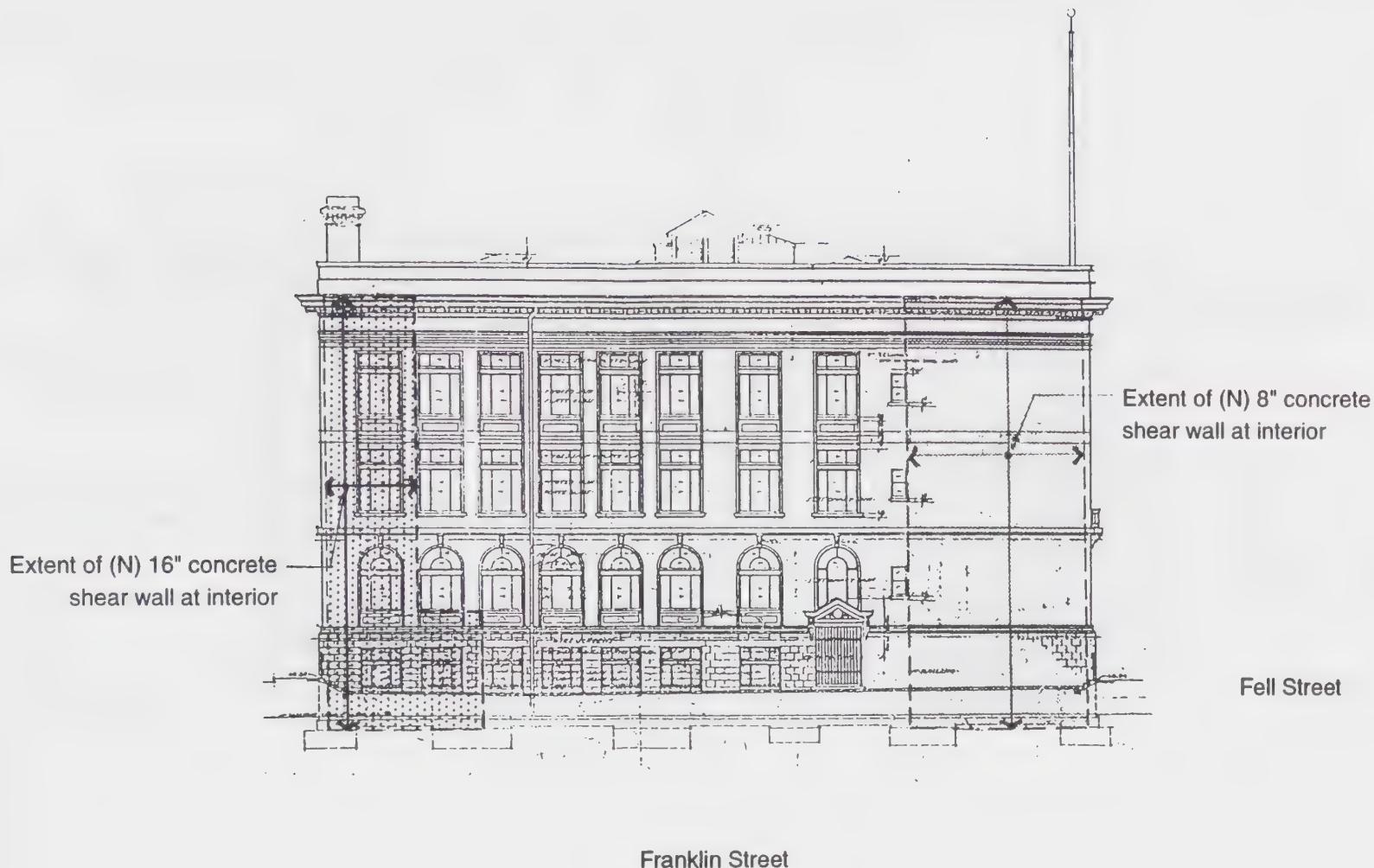
ALTERNATIVE B-1: EAST ELEVATION OF 170 FELL STREET BUILDING

FIGURE 25



Source: Degenkolb

ALTERNATIVE B-1: SOUTH ELEVATION OF 170 FELL STREET BUILDING FIGURE 26



Source: Degenkolb

ALTERNATIVE B-1: WEST ELEVATION OF 170 FELL STREET BUILDING

FIGURE 27

With the exception of existing interior stairs, identified "preservation" areas (U-shaped corridor plans with terminating stairs at their ends, surrounding a core area with toilet rooms, large multi-purpose spaces and a light well, and with individual classroom spaces at the building perimeter) would be reconstructed similar to their historic configurations.

ENVIRONMENTAL IMPACTS

The potential environmental impacts of Variant 1 would be similar to those of the proposed project, with one principal exception: under this variant, the 170 Fell Street building would not be demolished, thereby eliminating the significant impact to an historic architectural resource that would occur under the proposed project. The building would be retained, structurally improved for school occupancy, and key historic architectural features would be rehabilitated and preserved.

The Initial Study (Appendix A of this EIR) determined that the proposed project would not have significant impacts in the areas of land use, urban design, glare from nighttime lighting, population, noise, air quality and wind, utilities and public services, biology, geology and topography, water, energy, or hazards, and that further discussion of these topics in the EIR was unnecessary.² This variant would likewise not have significant impacts in these areas. Variant 1 would change the land use characteristics of the project site from administrative uses in the 135 Van Ness Avenue building to an educational institution, albeit not a specialized educational program. Therefore, this would not have a significant effect on the existing land use characteristics of the Hayes Valley neighborhood or the Civic Center area.

Similar to the proposed project, implementation of Variant 1 would result in an increase in the daily on-site population, which would only be noticeable in the immediately surrounding area. The increased student, faculty, and visitor population at the site would have a corresponding effect on traffic circulation and local area parking similar to the proposed project, which is described in detail in Section III.C of this EIR. In addition, Variant 1 includes some site and building access constraints, which could be mitigated with appropriate design features. At present, the existing distances between the 170 Fell Street building and the 135 Van Ness Avenue building are not adequate to provide unimpeded and safe ingress and egress for both handicapped and emergency vehicles access. Handicapped access is also currently unavailable at the front entrances of all site buildings except Nourse Auditorium.

Under this variant, all buildings on site would be retrofitted to meet current seismic and other life safety requirements. The 170 Fell Street building is a four-story, steel-framed building with perimeter unreinforced masonry walls. It was severely damaged as a result of the 1989 Loma Prieta earthquake, rendering it unsafe for regular occupancy. Under Variant 1, the 170 Fell Street building would be strengthened to meet the performance levels of the 1995 California Building Code for schools. The structural strengthening scheme would include the addition of new reinforced concrete at the inside face of all exterior brick walls, the light court and around the bathrooms. Foundation strengthening would be required beneath all new walls, and new plywood diaphragms at the roof and attic levels would be required. Chords and collectors would be added at eight locations per floor. Interior hollow clay tile at the corridors would be retained and strengthened.

REASONS FOR REJECTION OF THIS VARIANT

The project sponsor rejects variant 1 of Alternative B for the following reasons:

- This alternative would not allow the relocation of the existing SOTA from its temporary quarters -- a converted grammar school -- to a facility designed to fit the special programmatic needs of SOTA.
- This alternative would preclude the SFUSD from returning the existing SOTA campus at Font Street, originally designed for a grammar school for grades K through 8. Converting the existing SOTA campus to accommodate levels K through 8 or portions thereof is an important element of the SFUSD's plan to participate in a state funded program, which aims to reduce class sizes. At this time, even with the use of portable classrooms, SFUSD is having difficulty meeting the program schedule, in part because of the lengthy wait for portable classrooms. In order to complete implementation of the program for grades K through 8 as soon as possible, provision of additional classrooms now entail the conversion of other needed school facilities, such as decreasing the area devoted to library, gymnasium, or outdoor play areas.
- The SFUSD has no demand for a new high school with traditional classrooms. The project site, being bounded by Van Ness Avenue, Fell Street, Franklin Street

and Hayes Street, is not suitable for use as a grammar school because the demands for additional grammar school classrooms are in residential neighborhoods (not in the Civic Center), and the high volume of traffic on the street adjacent to the project site would raise potential safety issues for young children attending grammar schools.

- The project site is the only site of sufficient size to house an expanded SOTA with an anticipated student body of 1,000.
- This alternative would not provide suitable specialized space for the special SOTA program components.
- Due to the difference in grade levels between the existing 170 Fell Street Building, the interior court yard, the Nourse Auditorium and the 135 Van Ness Avenue Building Complex, students with mobility problems would be exposed to the elements during inclement weather going to and from classrooms between buildings.

B.2. VARIANT 2: PRESERVATION AND ADAPTIVE REUSE OF 170 FELL STREET FOR THE SOTA PROGRAM USE, WITH THE CONVERSION OF THE LIBRARY WING AND THE GYMNASIUM WING OF THE 135 VAN NESS AVENUE BUILDING SIMILAR TO THE PROPOSED PROJECT

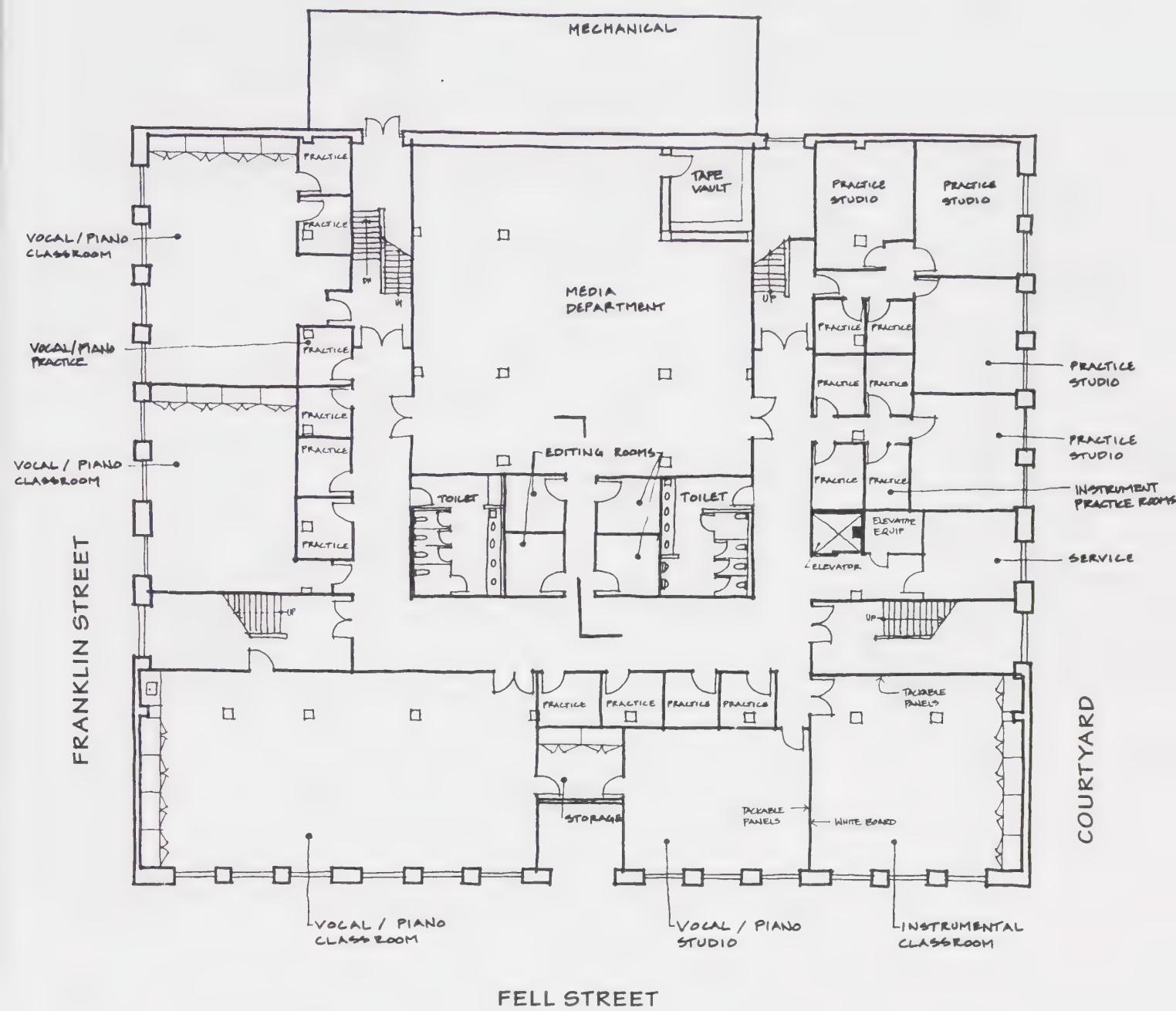
DESCRIPTION

The principal objective of Variant 2 is to retain the 170 Fell Street building, preserve its historic architectural integrity, and adaptively reuse the building for the performing arts component of the SOTA program. This variant of Alternative B would allow the relocation of SOTA to the proposed project site, with the adaptive reuse of the 170 Fell Street building, the 135 Van Ness Avenue building, and Nourse Auditorium. The SFUSD administrative staff would relocate and the entire complex of buildings would be seismically upgraded and rehabilitated similar to that described in Variant 1 and in the proposed project for 135 Van Ness Avenue Building. Under this variant the key architectural features of the 170 Fell Street building would be preserved, and the building would be reconstructed similar to the original configuration, incorporating the existent

conventional classroom and corridor layouts. However, there would be a two-level Black Box Theater that would require removal of some structural columns. The building would be structurally strengthened to meet current building code and seismic safety standards applicable to educational uses (Figures 28 to 33, pages 6-16 to 6-21).

The objective of this variant is the preservation, to the maximum extent feasible, of the interior spaces of the existing the 170 Fell Street Building for the performing arts. In order to achieve this objective, the proposed SOTA program would have to be modified. The large space requirements of the proposed project would not be met in this variant. The plan would consist of perimeter classrooms throughout the first through third floors, with a large scale, multi-purpose space at the existing third floor hearing room location. Toilet rooms would be located where they exist today, and the existing elevator would be retrofitted. The structural modifications described above for Variant 1 would also be performed for Variant 2. In addition, Variant 2 would be subject to the same architectural preservation requirements as Variant 1, also described above.

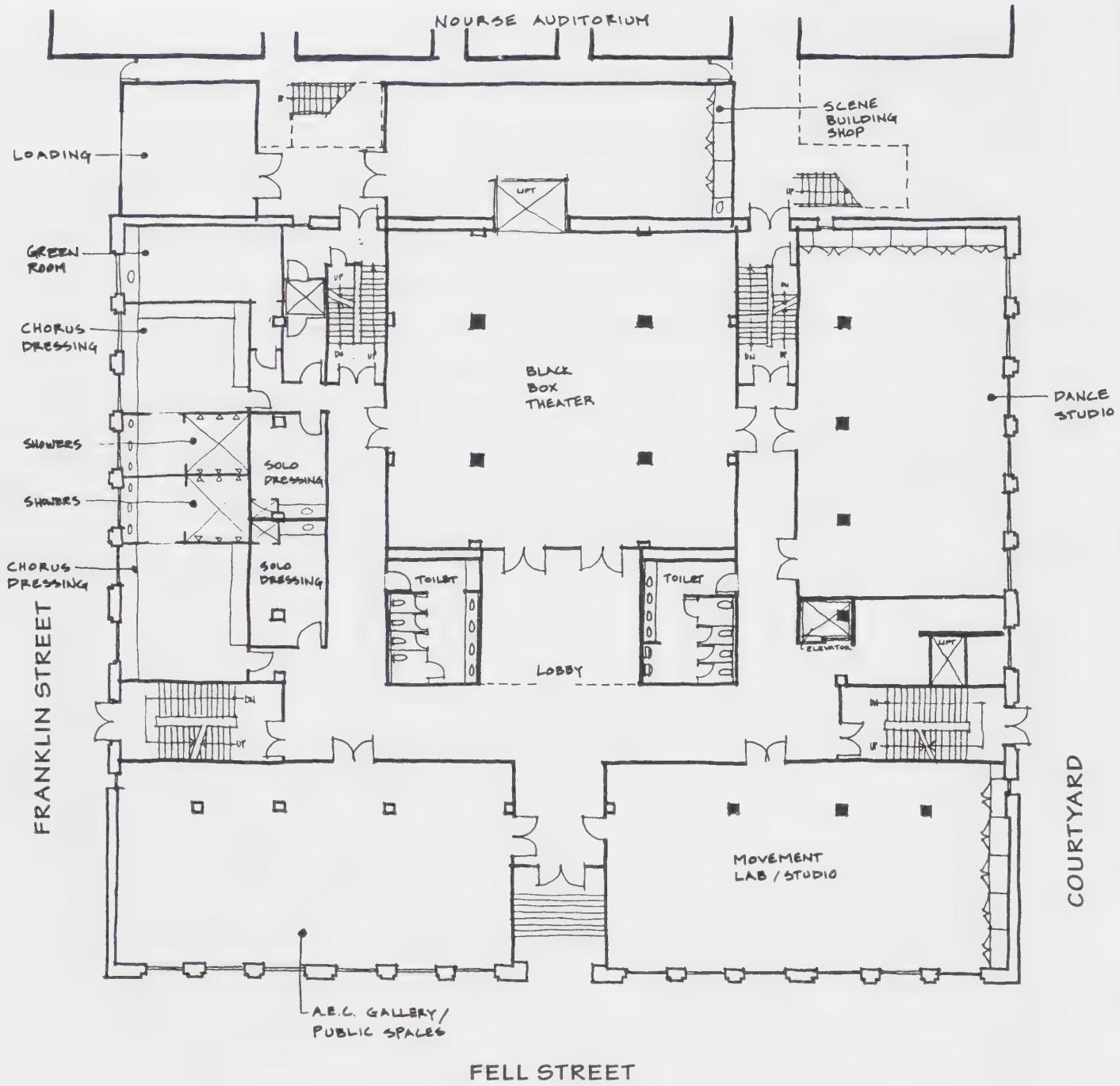
Under this variant, the partial basement would be used for classrooms for vocal/piano, instrumental and the media department and practice studios. The first floor level would be used for the Black Box Theater and related performance support functions, movement studio, movement lab/studio and the Arts Education Center gallery. Because of the differences of the first level of the existing 170 Fell Street Building and the Nourse Auditorium and the ground level of the 135 Van Ness Avenue Building, a lift would be installed off the courtyard to provide handicapped access to the building for students, visitors and teachers with mobility problems. A lift would be installed in the rear of the Black Box Theater to facilitate the moving of scenery and other items to and from the Black Box Theater to the Nourse Auditorium. Costume/prop and other storage would be located on the second level of the building, along with design classrooms, faculty and Arts Education Center offices, the third level of the 170 Fell Street Building would house the dance studios, dressing rooms and additional classrooms.



Source: Gordon H. Chong + Partners

ALTERNATIVE B-2: LOWER LEVEL 170 FELL STREET BUILDING

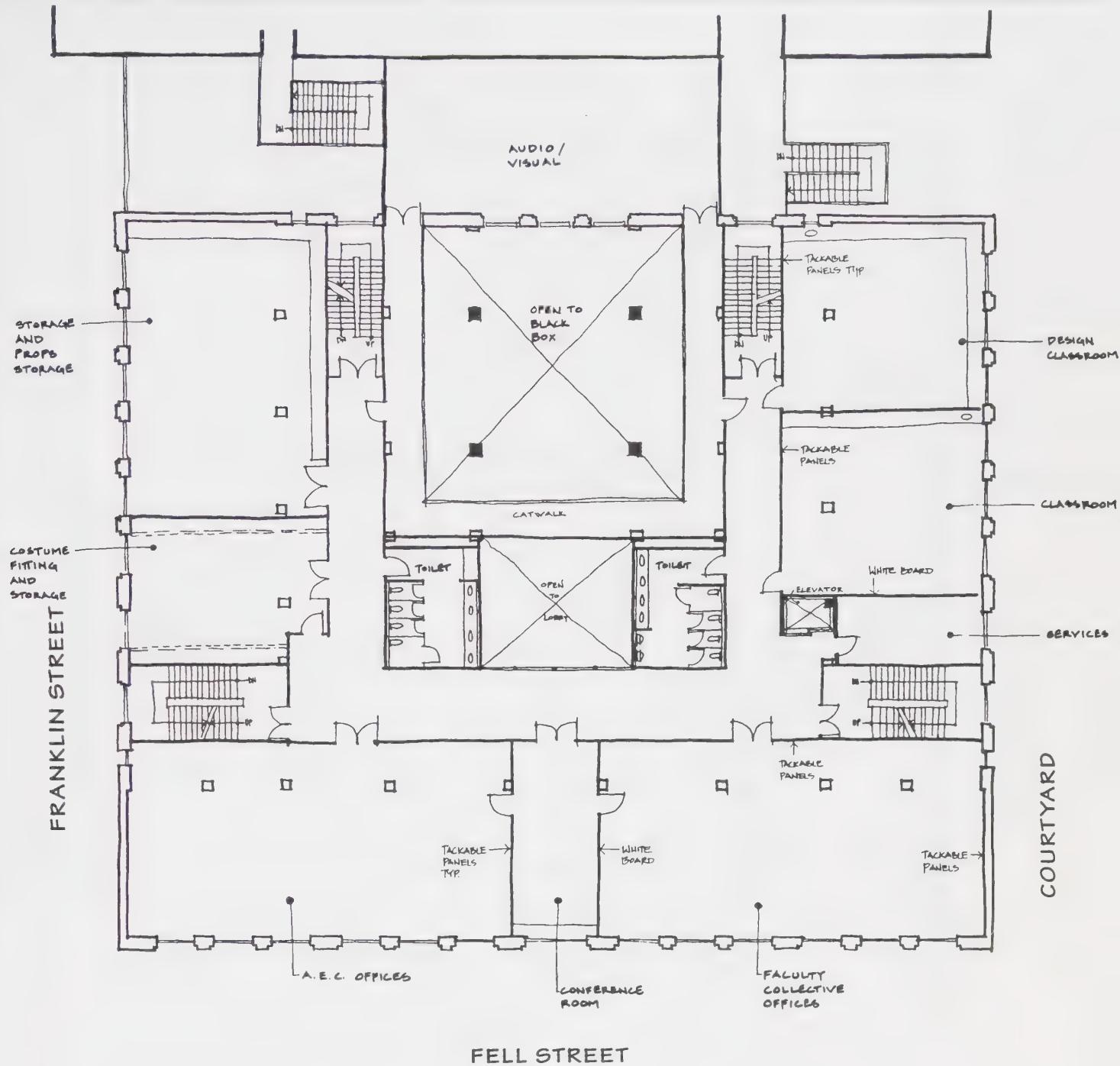
FIGURE 28



Source: Gordon H. Chong + Partners

ALTERNATIVE B-2: FIRST LEVEL 170 FELL STREET BUILDING

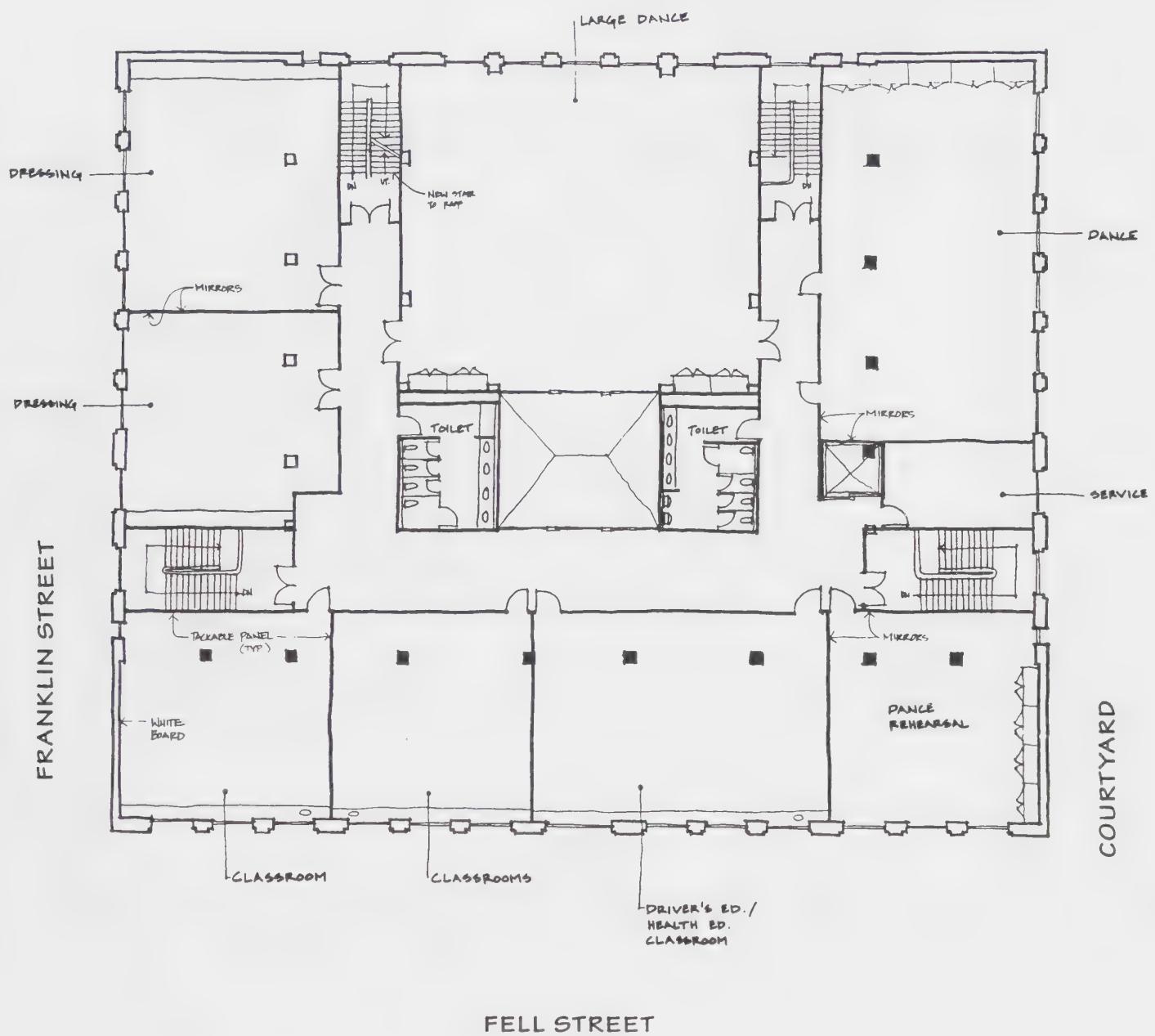
FIGURE 29



Source: Gordon H. Chong + Partners

ALTERNATIVE B-2: SECOND LEVEL 170 FELL STREET BUILDING

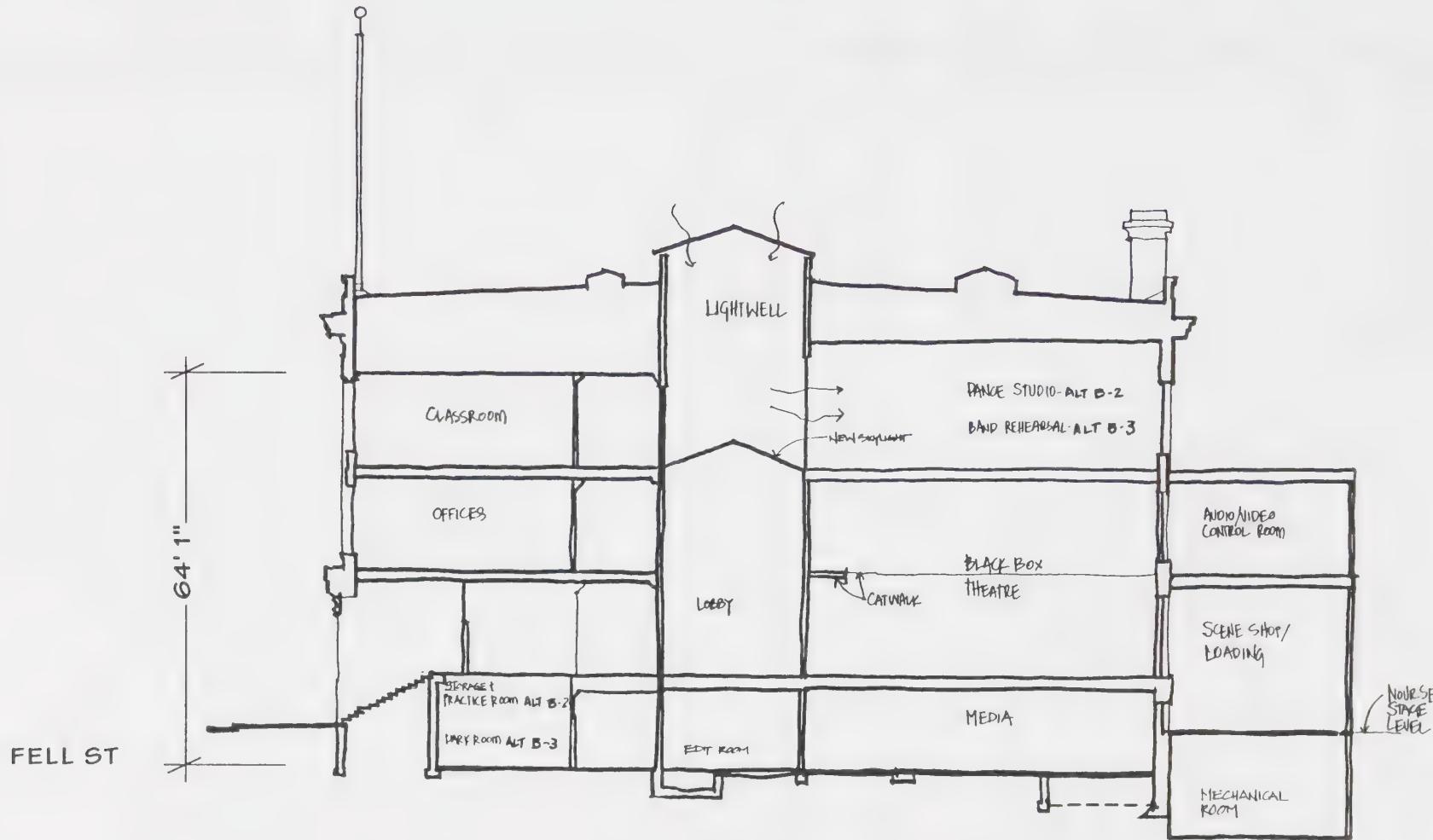
FIGURE 30



Source: Gordon H. Chong + Partners

ALTERNATIVE B-2: THIRD LEVEL 170 FELL STREET BUILDING

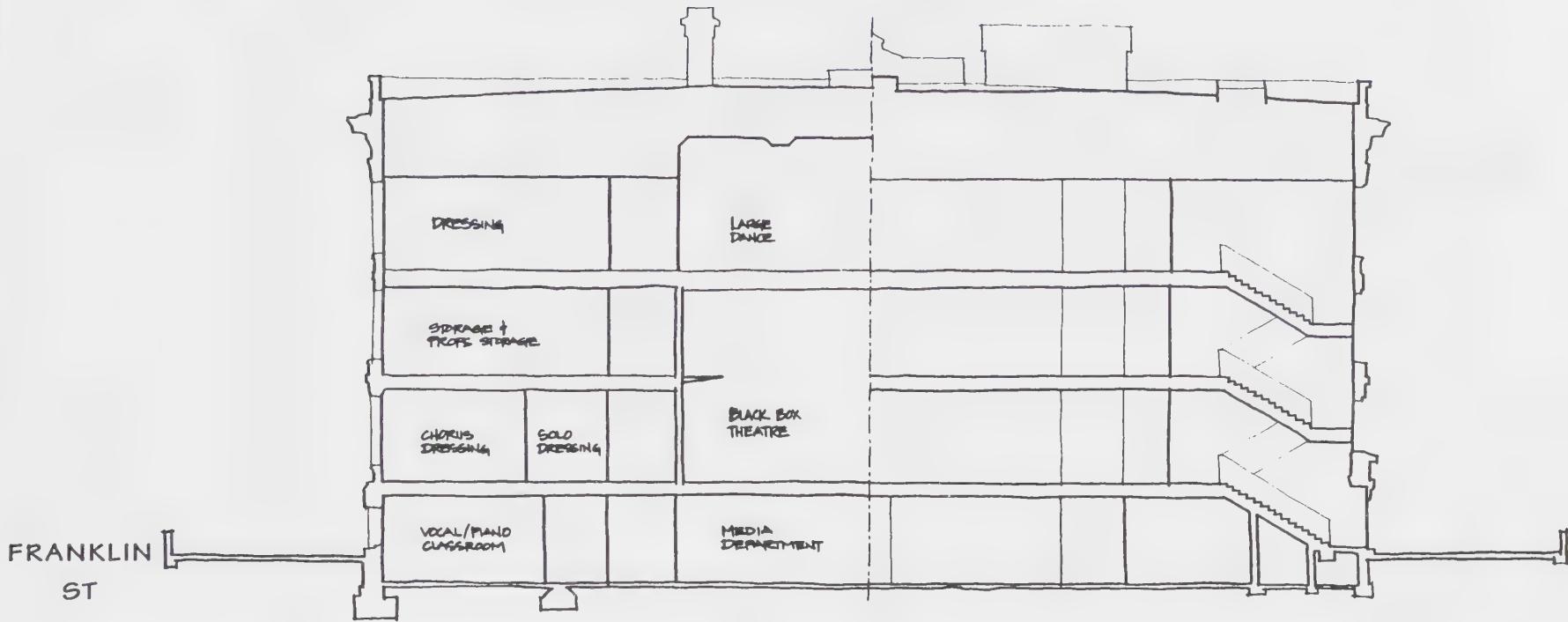
FIGURE 31



Source: Gordon H. Chong + Partners

ALTERNATIVES B-2 & 3: SECTION—LOOKING WEST, 170 FELL STREET BUILDING

FIGURE 32



Source: Gordon H. Chong + Partners

ALTERNATIVES B-2 & 3: SECTION—LOOKING NORTH, 170 FELL STREET BUILDING FIGURE 33

Under this variant, the Library Wing of the 135 Van Ness Avenue Building would be decreased by one bay in order to create a new entrance to the SOTA complex that would be handicapped accessible. The Library Wing, which would be about 20 percent smaller in size (about 525 sq. ft.), would be used as a rehearsal hall for band, instrumental and chorus, similar to the proposed project.

Based on the architectural and structural recommendations for this alternative, the improvements to the 170 Fell Street building are estimated to cost approximately \$26.078 million, including soft development and hard construction, compared to \$17.75 million for the proposed project.³ This cost estimate excludes costs related to sidewalk and landscape improvements, moveable classroom/office equipment, telecommunications and other wiring and cabling, insurance, and other miscellaneous expenses.

ENVIRONMENTAL IMPACTS

The potential environmental impacts of Variant 2 would be similar to those of the proposed project, with one principal exception: under this variant, the 170 Fell Street building would not be demolished, thereby eliminating the significant impact to an historic architectural resource that would occur under the proposed project. The building would be retained, structurally improved for school occupancy, and key historic architectural features would be rehabilitated and preserved.

The Initial Study (Appendix A of this EIR) determined that the proposed project would not have significant impacts in the areas of land use, urban design, glare from nighttime lighting, population, noise, air quality and wind, utilities and public services, biology, geology and topography, water, energy, or hazards, and that further discussion of these topics in the EIR was unnecessary. This variant would likewise not have significant impacts in these areas. Variant 2 would change the land use characteristics of the project site from administrative uses in the 135 Van Ness Avenue building to an educational institution for performing arts. However, this would not have a significant effect on the existing land use characteristics of the Hayes Valley neighborhood or the Civic Center area. Under this Variant, all buildings on site would be retrofitted to meet current life safety requirements.

Variant 2 would be similar to the proposed project and Variants 1 and 3, by increasing the daily on-site population at the project site. Under this variant, the project would generate the same new vehicle-trips as the proposed project.

Site and building access issues discussed under Variant 1 would also apply to Variant 2. In addition, the SOTA program would require truck access to the courtyard for delivery of materials to be used in the SOTA curriculum. This would also be the handicapped access for students. Existing distances between the 170 Fell Street building and the north and south wings of 135 Van Ness Avenue restrict the separation between pedestrian traffic from delivery vehicles.

The existing Nourse Auditorium has a narrow area behind the stage, no dressing rooms, stage wing, and support space for performances. Therefore, all supportive functions for the Nourse Auditorium performances must be housed in the 170 Fell Street Building. This preservation variant would require the installation of a lift behind the proposed Black Box Theater in order to move scenery and other items for performances.

REASONS FOR REJECTION OF THIS VARIANT

The project sponsor rejects this variant of the Preservation Alternative variant for the following reasons:

- This variant of the preservation alternative forces the proposed performing arts component of the SOTA program into the existing 170 Fell Street Building. The spaces for the performing arts component would be less than ideal due to constraints of the existing building and the need to maintain the "preservation" zones and the locations of existing structural columns.
- The proximity of similar classrooms for related curriculum courses would be inadequate.
- The difference between the first floor level of the existing 170 Fell Street Building, which is approximately 6 feet above the sidewalk, the interior court yard, the Nourse Auditorium and the ground floor level of the 135 Van Ness Avenue Building, presents practical difficulties for interaction between the uses of the

Nourse Auditorium and the 170 Fell Street Building, and raises of accessibility for mobility-impaired students.

- The use of both the Nourse Auditorium and the Black Box Theater would be limited because the Black Box Theater cannot be used when the stage of the Nourse Auditorium is being prepared for a performance, and vice-versa.
- Performers who are mobility-impaired can access the Nourse Auditorium stage only through the use of the lift behind the Black Box Theater from the 170 Fell Street Building. If the Black Box Theater is being used, performers with mobility problems can access the Nourse Auditorium stage only through the aisles of the auditorium itself.
- The existing ceiling height of the 170 Fell Street Building is only 11 feet 5 inches high. After adaptive reuse for the SOTA program, which would require the building to be mechanically ventilated, portions of the ceiling height in most rooms would be decreased to 9 feet 5 inches. The low ceiling height would not be suitable for performing arts studios/classrooms, such as orchestral, band or choir.
- The need to preserve the existing columns decreases the usable space in some of the studios/classrooms.
- This variant is economically infeasible in that the SFUSD has budgeted \$46 million for this project, with \$14 million from FEMA and the remaining from various bond issues approved by the voters. The cost of this variant is estimated to be \$26.078 million, which is \$8.33 million more than the proposed new 170 Fell Street Building. It is the opinion of the project sponsor that the additional public funds required to implement this variant should be spent on educational programs for the children of San Francisco, and not on preservation of an existing building, albeit with historic or architectural significance.

B.3. VARIANT 3: PRESERVATION AND ADAPTIVE REUSE OF 170 FELL STREET FOR THE SOTA PROGRAM USE WITH THE USES OF THE LIBRARY AND GYMNASIUM DIFFERENT THAN THE PROPOSED PROJECT

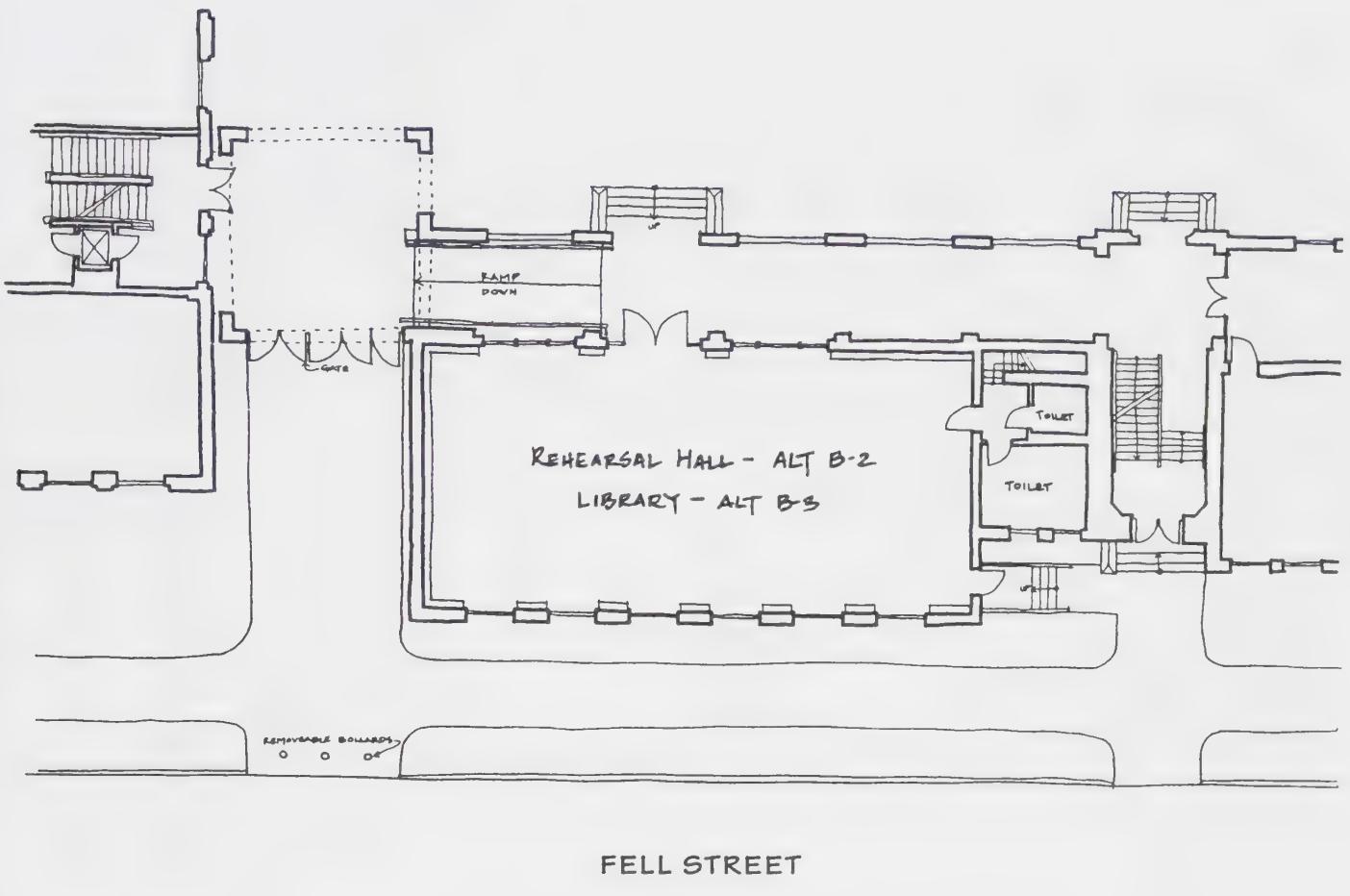
DESCRIPTION

The principal objective of Variant 3 would be the same as the other Variants in Alternative B: to retain the 170 Fell Street building, preserve its historic architectural integrity, and in the case of Variant 2 to adaptively reuse the building for SOTA program needs. Similar to the project, Variant 2 would entail the relocation of SOTA to the proposed project site, with the adaptive reuse of the 170 Fell Street building, the 135 Van Ness Avenue building, and Nourse Auditorium. This variant of Alternative B would differ from Variant 2. Unlike the proposed project and Variant 2 where the visual arts component would be in the Gymnasium wing of 135 Van Ness and the performing arts component in the 170 Fell Street building, the Library wing and Gymnasium wing of the 135 Van Ness Avenue building as well as the 170 Fell Street building would be used for both the visual arts and performing arts components.

The key architectural features of the 170 Fell Street building would be preserved, while it would be structurally strengthened to meet current building code and seismic safety standards applicable to educational uses (Figures 34 to 41, pages 6-26 to 6-33).

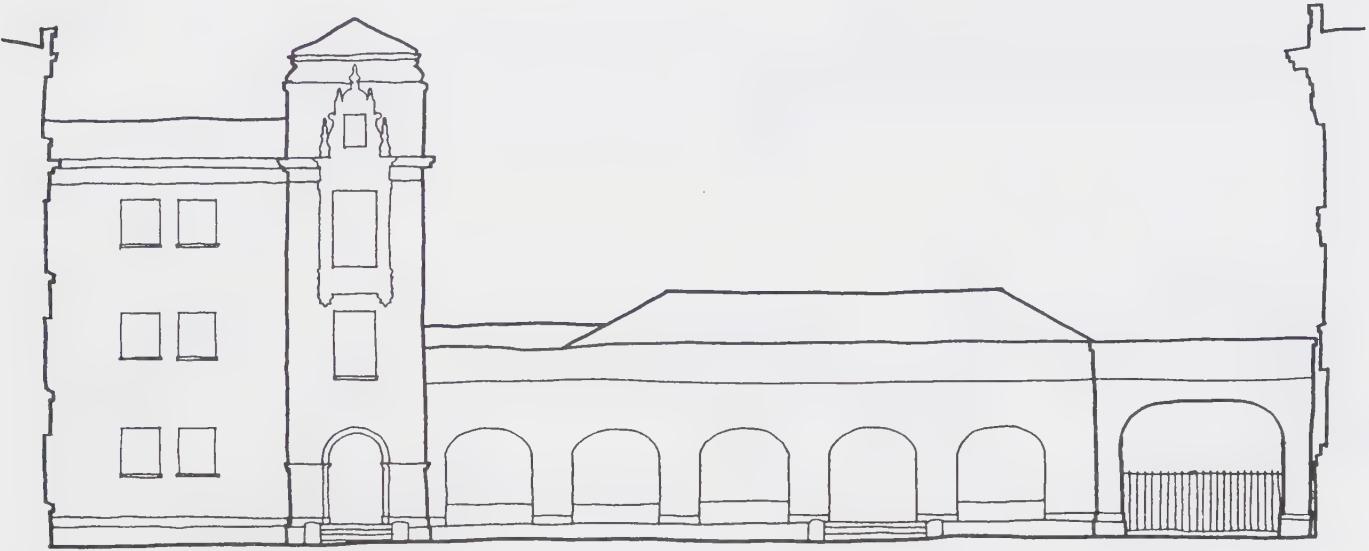
The proposed project separates the visual arts and performing arts components by locating the visual arts component in the renovated Gymnasium Wing of the 135 Van Ness Avenue Building, and the performing arts component in the new 170 Fell Street Building. In order to preserve as much of the interior spaces of the existing 170 Fell Street Building, this variant would require the inter-mingling of visual arts classrooms with the performing arts classrooms.

The partial basement of the 170 Fell Street Building would be used for storage, costume storage, classrooms for acting, design and photography, printmaking, screening/editing rooms/media storage, and mechanical spaces. In contrast, there would be no partial basement area in the proposed new 170 Fell Street Building.



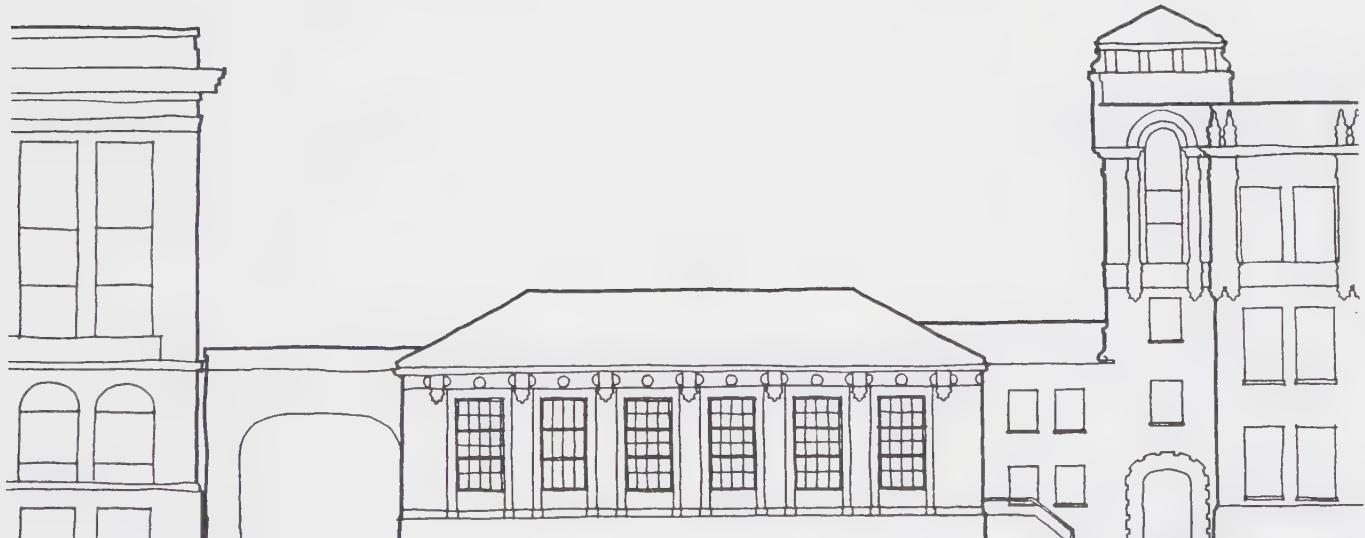
Source: Gordon H. Chong + Partners

ALTERNATIVES B-2 & 3: FIRST LEVEL SOUTH WING 135 VAN NESS AVENUE BUILDING FIGURE 34



COURTYARD

Courtyard Elevation

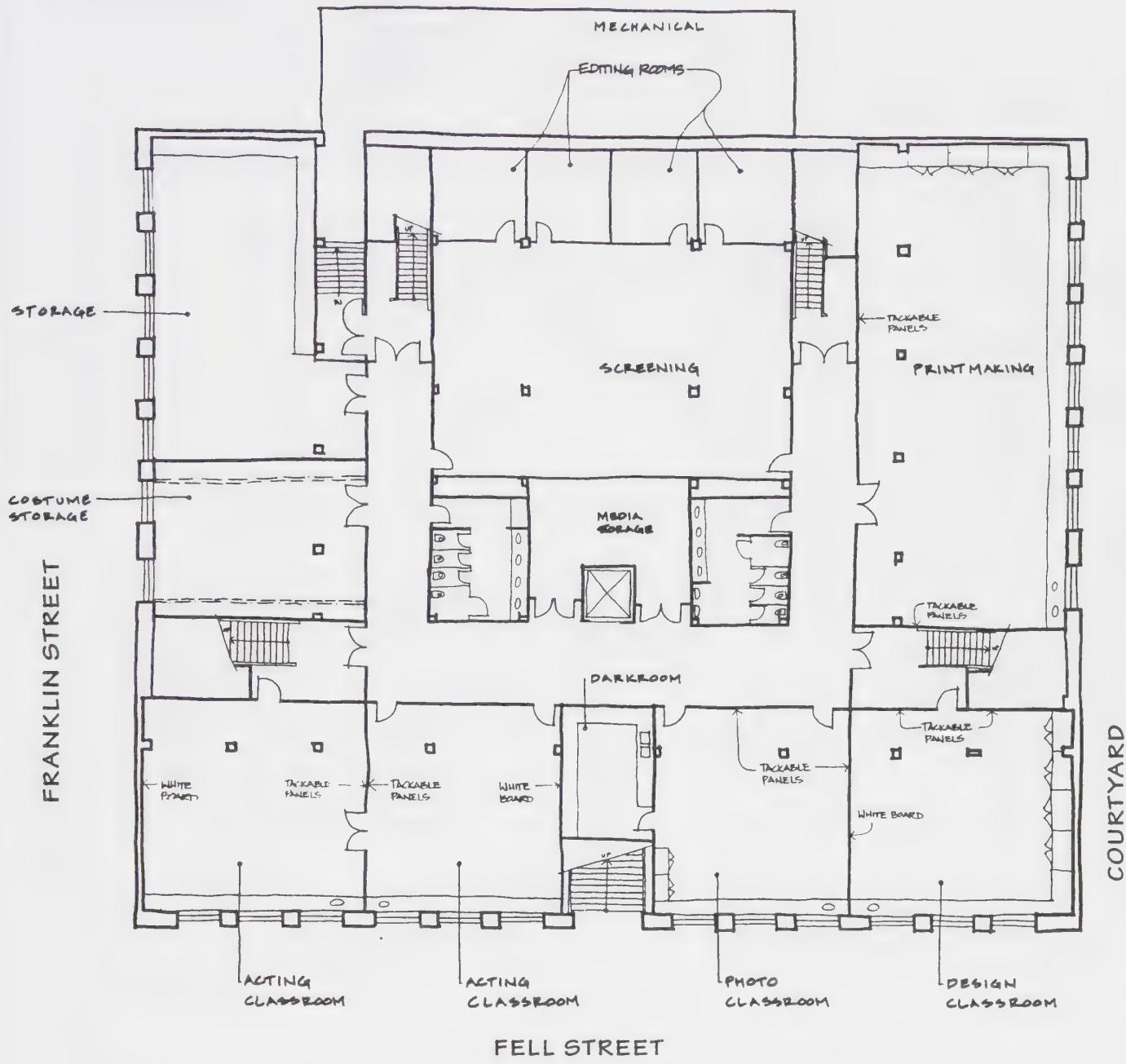


FELL STREET

Fell Street Elevation

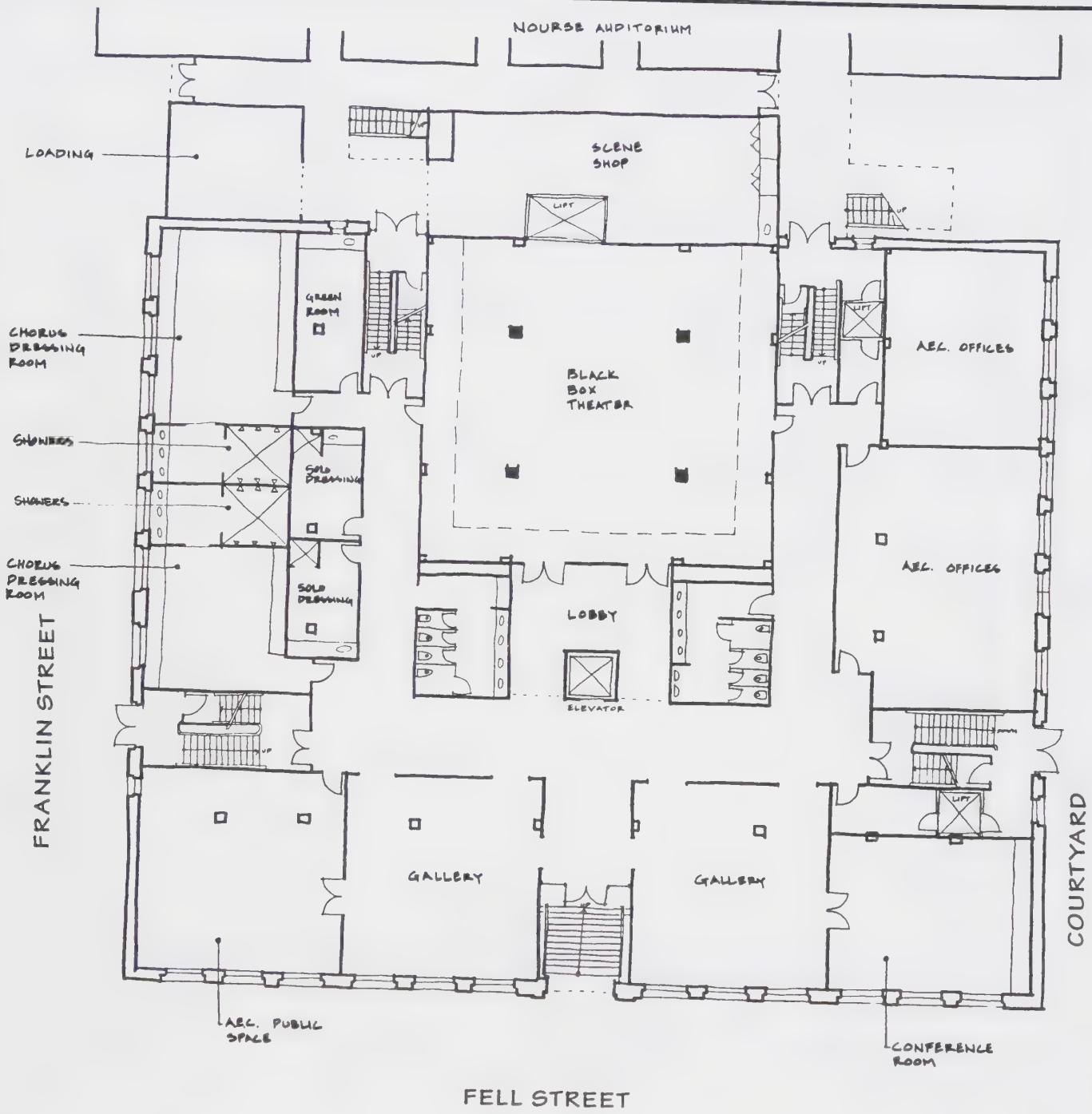
Source: Gordon H. Chong + Partners

ALTERNATIVES B-2 & 3: ELEVATIONS SOUTH WING 135 VAN NESS AVENUE BUILDING FIGURE 35



Source: Gordon H. Chong + Partners

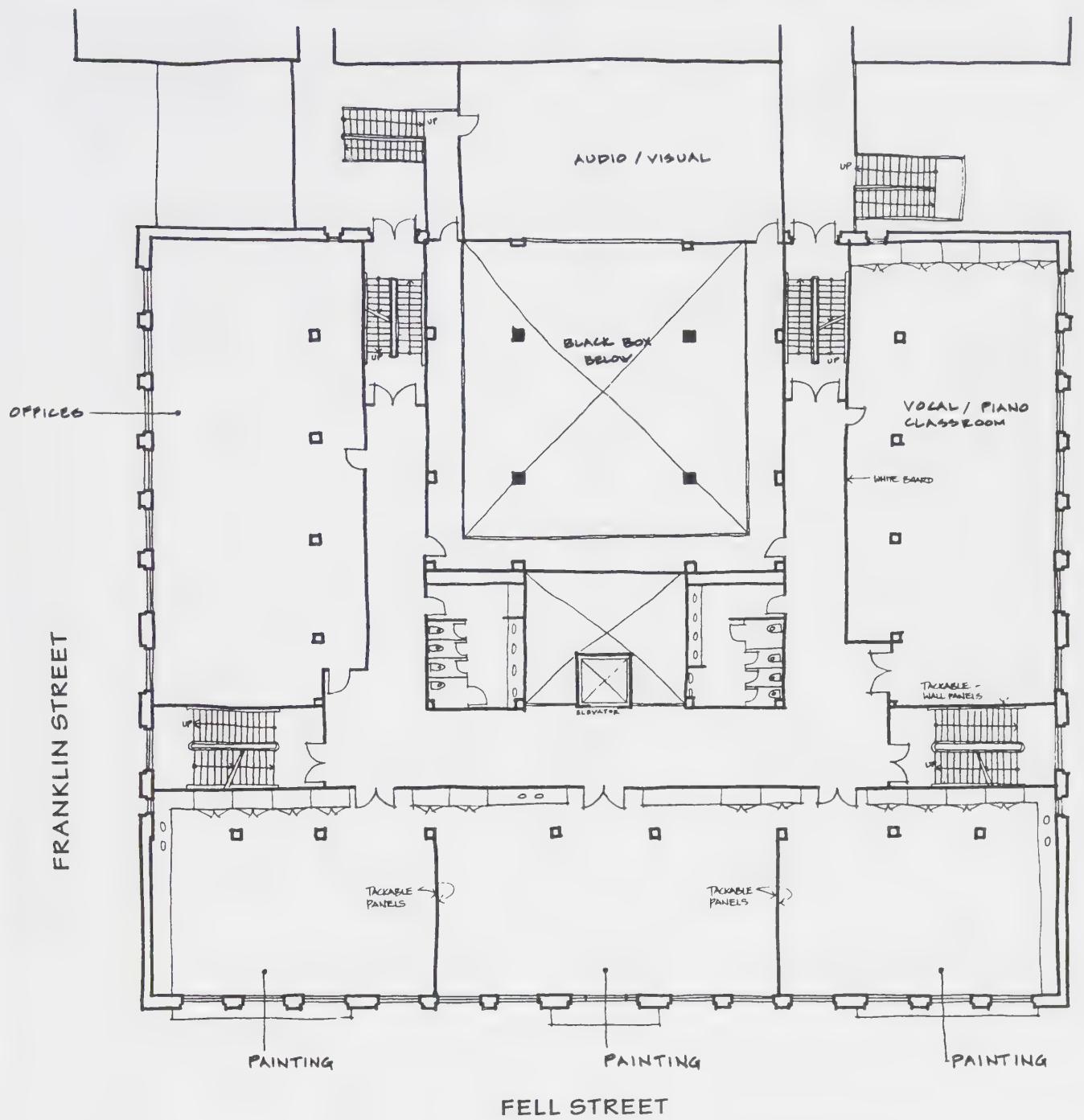
ALTERNATIVE B-3: LOWER LEVEL 170 FELL STREET BUILDING **FIGURE 36**



Source: Gordon H. Chong + Partners

ALTERNATIVE B-3: FIRST LEVEL 170 FELL STREET BUILDING

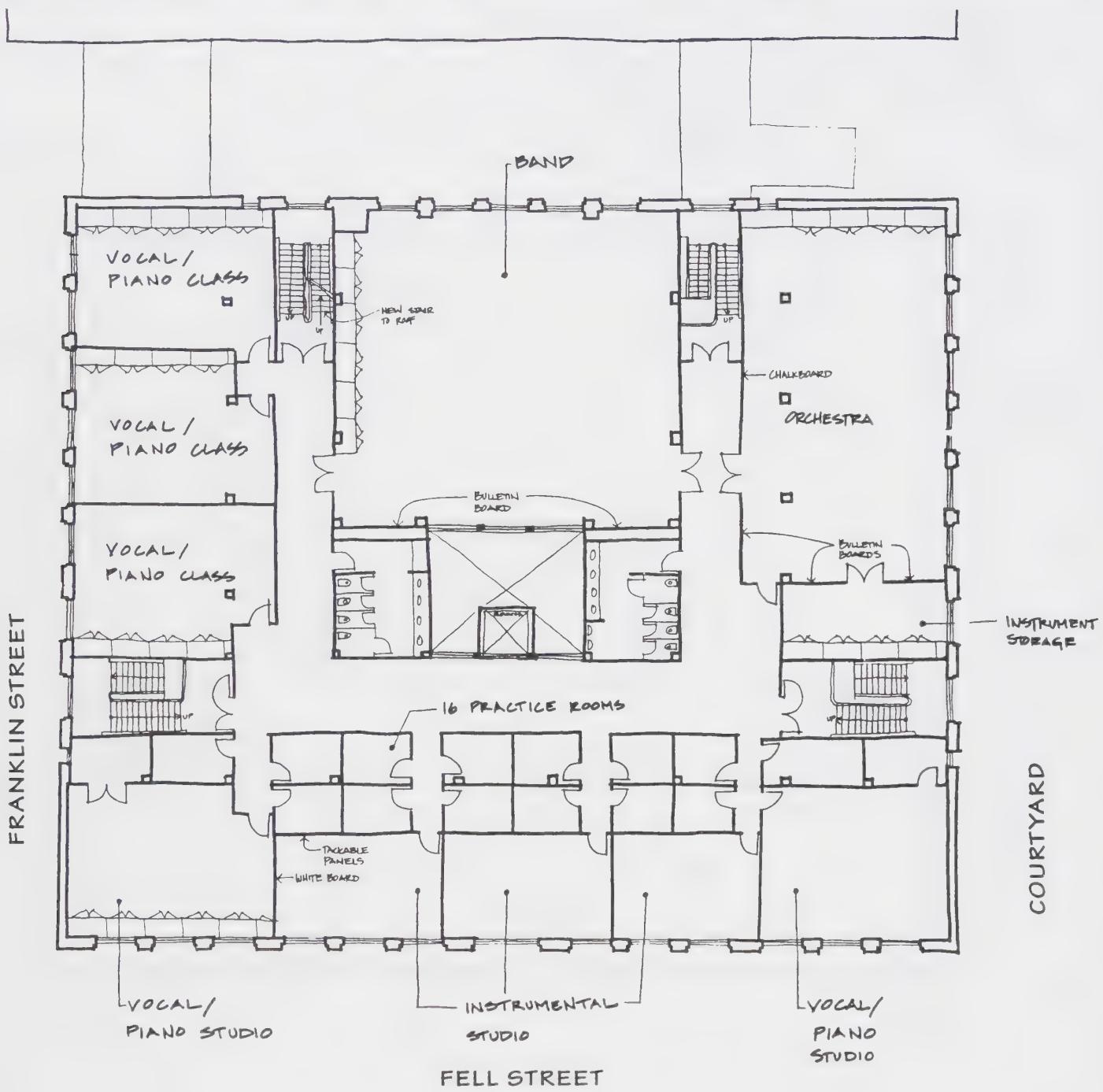
FIGURE 37



Source: Gordon H. Chong + Partners

ALTERNATIVE B-3: SECOND LEVEL 170 FELL STREET BUILDING

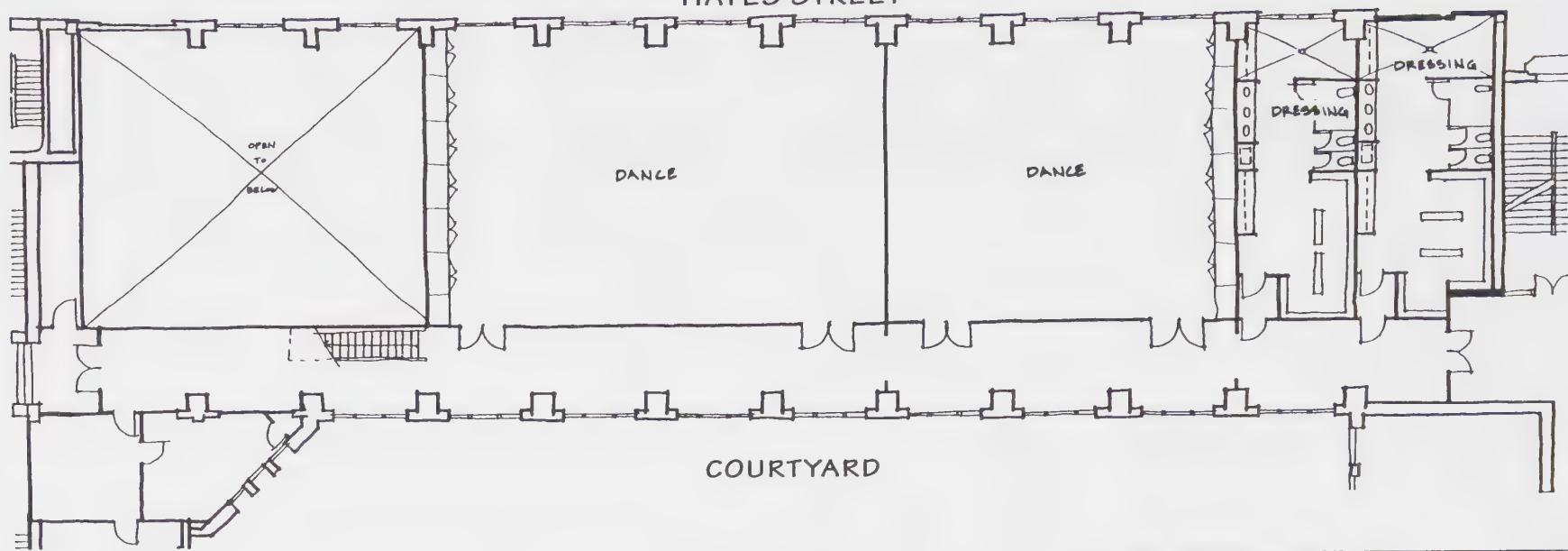
FIGURE 38



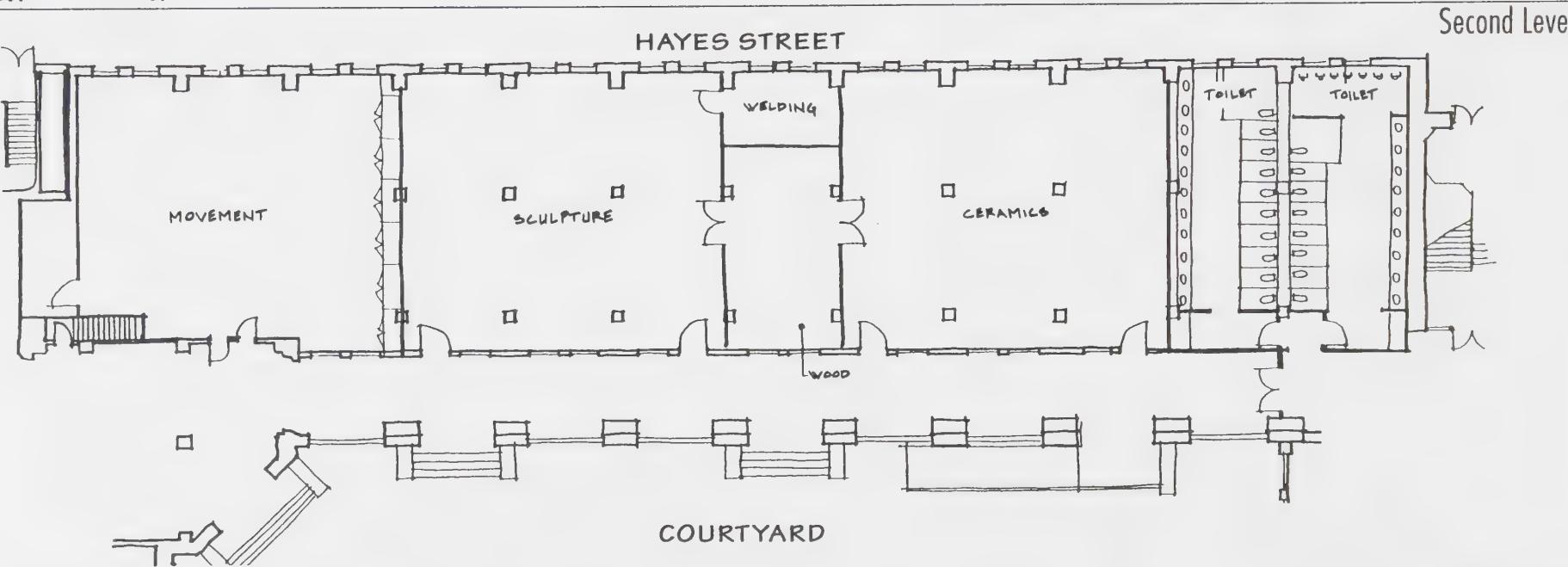
Source: Gordon H. Chong + Partners

ALTERNATIVE B-3: THIRD LEVEL 170 FELL STREET BUILDING

FIGURE 39



6-32

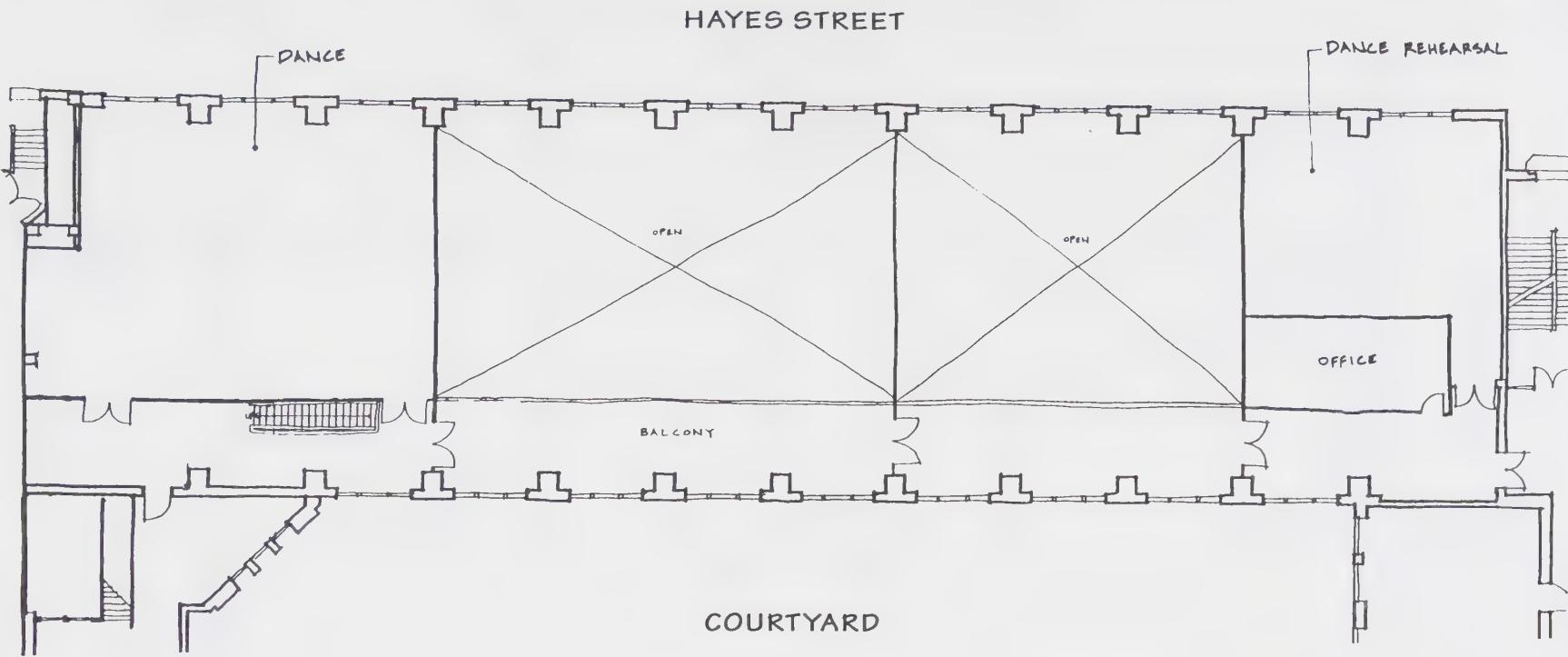


Source: Gordon H. Chong + Partners

ALTERNATIVE B-3: NORTH WING 135 VAN NESS AVENUE BUILDING

First Level

FIGURE 40



Third Level

Source: Gordon H. Chong + Partners

ALTERNATIVE B-3: NORTH WING 135 VAN NESS AVENUE BUILDING

FIGURE 41

The first level of the existing building would house the Black Box Theater, scene shop, dressing rooms, conference room, two galleries and offices for the Arts Education Center. In comparison, the ground floor of the new 170 Fell Street Building would be devoted to the Black Box Theater, the support functions of live performances at both the Black Box Theater and the Nourse Auditorium, and gallery space adjacent to the main entrance for the SOTA complex and the courtyard.

The second level of the existing 170 Fell Street Building would house offices, the upper half of the Black Box Theater, classrooms for vocal/piano, and painting.

The third level of the existing 170 Fell Street Building would house classrooms/studio for vocal/piano, orchestra, instrumental, band and individual practice rooms.

With the exception of the Black Box Theater and the existing auditorium on the third floor, which would have two-story volumes, all the other spaces would have a height of 9 feet 5 inches whereas the proposed new 170 Fell Street Building would have ceiling heights varying from 10 feet 6 inches to 18 feet.

Under this variant, the Library Wing of the 135 Van Ness Avenue Building would be decreased by one bay in order to create a new entrance to the SOTA complex that would be handicapped accessible. The Library Wing, which would be about 20 percent smaller in size (about 525 sq. ft.), would be used as a library, different than the proposed project.

Under this variant, the Gymnasium Wing of the 135 Van Ness Avenue Building would house the movement lab, classroom for sculpture, welding, ceramics on the ground floor, and dance studios on the upper floors. In comparison, the Gymnasium Wing would be used exclusively for the visual arts classes, a Theater lab classroom, and a gallery for displaying students' work.

To achieve maximum preservation of the existing interior space, only the existing columns in the Black Box Theater space would be removed, all other existing columns and the interior corridors would be preserved. As a result, many of the classrooms/studio, office and galleries would have free-standing columns within those spaces.

Based on the architectural and structural recommendations for this alternative, the improvements to the 170 Fell Street building are estimated to cost approximately \$25.128 million, including soft development and hard construction, compared to \$17.746 million for the proposed project.⁴ This cost estimate excludes costs related to sidewalk and landscape improvements, moveable classroom/office equipment, telecommunications and other wiring and cabling, insurance, and other miscellaneous expenses.

ENVIRONMENTAL IMPACTS

The potential environmental impacts of Variant 3 would be similar to those of the proposed project, with one principal exception: under this variant, the 170 Fell Street building would not be demolished, thereby eliminating the significant impact to an historic architectural resource that would occur under the proposed project. The building would be retained, structurally improved for school occupancy, and key historic architectural features would be rehabilitated and preserved.

The Initial Study (Appendix A of this EIR) determined that the proposed project would not have significant impacts in the areas of land use, urban design, glare from nighttime lighting, population, noise, air quality and wind, utilities and public services, biology, geology and topography, water, energy, or hazards, and that further discussion of these topics in the EIR was unnecessary. This variant would likewise not have significant impacts in these areas. Variant 3 would change the land use characteristics of the project site from administrative uses in the 135 Van Ness Avenue block to an educational institution for arts. However, this would not have a significant effect on the existing land use characteristics of the Hayes Valley neighborhood or the Civic Center area. Under this alternative, all buildings on site would be retrofitted to meet current life safety requirements. Site and building access issues discussed under Variants 1 and 2 would also apply to Variant 3.

Variant 3 would be similar to the proposed project and Variants 1 and 2, by increasing the daily on-site population at the project site. Under this variant, the project is anticipated to generate approximately the same level of trips as the proposed project.

REASONS FOR REJECTION OF THIS VARIANT

In addition to the reasons rejecting Variant 2 of this Alternative, the project sponsor rejects this Alternative for the following additional reasons:

- This variant would not meet the proximity requirement desired for grouping all the performing arts in one building and the visual arts in another building. Placement of visual arts classrooms in the lower level (half below grade), such as printing, is unacceptable. The classrooms for painting would have a southern exposure instead of the northern exposure in the proposed project.
- The proximity of classrooms to various types of studio space could result in dust, noise, and vibration impacts to students in classrooms. Dust from sculpture and ceramics studios could also affect other visual arts studios requiring space free of dust, such as printmaking and photography.
- Activities of the visual arts and performing arts classrooms require different learning environments. In order to minimize vibration and noises generated by the performing arts classes, the Gymnasium wing must be retrofitted to address issues raised by noise and vibration, thereby further increasing the costs of construction.
- Interaction between the various disciplines within the visual arts component and within the performing arts component would be decreased, (i.e., the dance studios would be in a different building).
- This variant would be economically infeasible in that the SFUSD has budgeted \$46 million for this project, with \$14 million from FEMA and the remaining from various bond issues approved by the voters. The construction cost of this variant is estimated to be \$25,126,000, which is \$7,380,000 more than the proposed new 170 Fell Street Building. It is the opinion of the project sponsor that the additional public funds required to implement this variant should be spent on educational programs for the children of San Francisco, and not on preservation of an existing building, albeit with historic or architectural significance.

C. ALTERNATIVE C: PRESERVATION AND ADAPTIVE REUSE OF 170 FELL STREET FOR NON-EDUCATIONAL USE

DESCRIPTION

The principal objective of Alternative C is to retain the 170 Fell Street building, preserve its historic architectural integrity. Under Alternative C, the School of the Arts (SOTA) would not relocate to the project site. The SFUSD administrative staff would remain at the site. The 135 Van Ness Avenue Building and Nourse Auditorium would be seismically upgraded and rehabilitated to meet current state and local building code standards for office use. This alternative would retain the 170 Fell Street building, preserving its key architectural features and strengthening it to meet current building code and seismic safety standards conventional occupancy.

This alternative would reuse the buildings in the complex for office use by the SFUSD, or another user, allowing for the first through third floors to be planned with office space throughout, with a set of toilet rooms at each floor in the existing toilet room locations. The partially below grade basement floor would be dedicated to multi-purpose rooms, work areas, files, storage and mechanical spaces.

The 170 Fell Street Building would have to be seismically strengthened to meet current city and state building standards. Proposed work at the exterior would be limited to materials repair and restoration, including restoring the damaged and partially removed parapet; restoration of brick, terra cotta, windows and doors; and removal of the existing ramp structure at the front entry, restoration of this entry way, and alteration of the existing east entry to allow for building access.

Construction work would primarily effect the 170 Fell Street building interior, where a large proportion of existing interior construction and finishes would require removal for proposed seismic strengthening and office-related improvements. Proposed new strengthening work would include L-shaped, reinforced concrete walls positioned in the corners of the building, from foundation to roof and would be held within the plane of the existing windows. While these walls would have relatively short legs and take full advantage of existing, solid exterior walls, a number

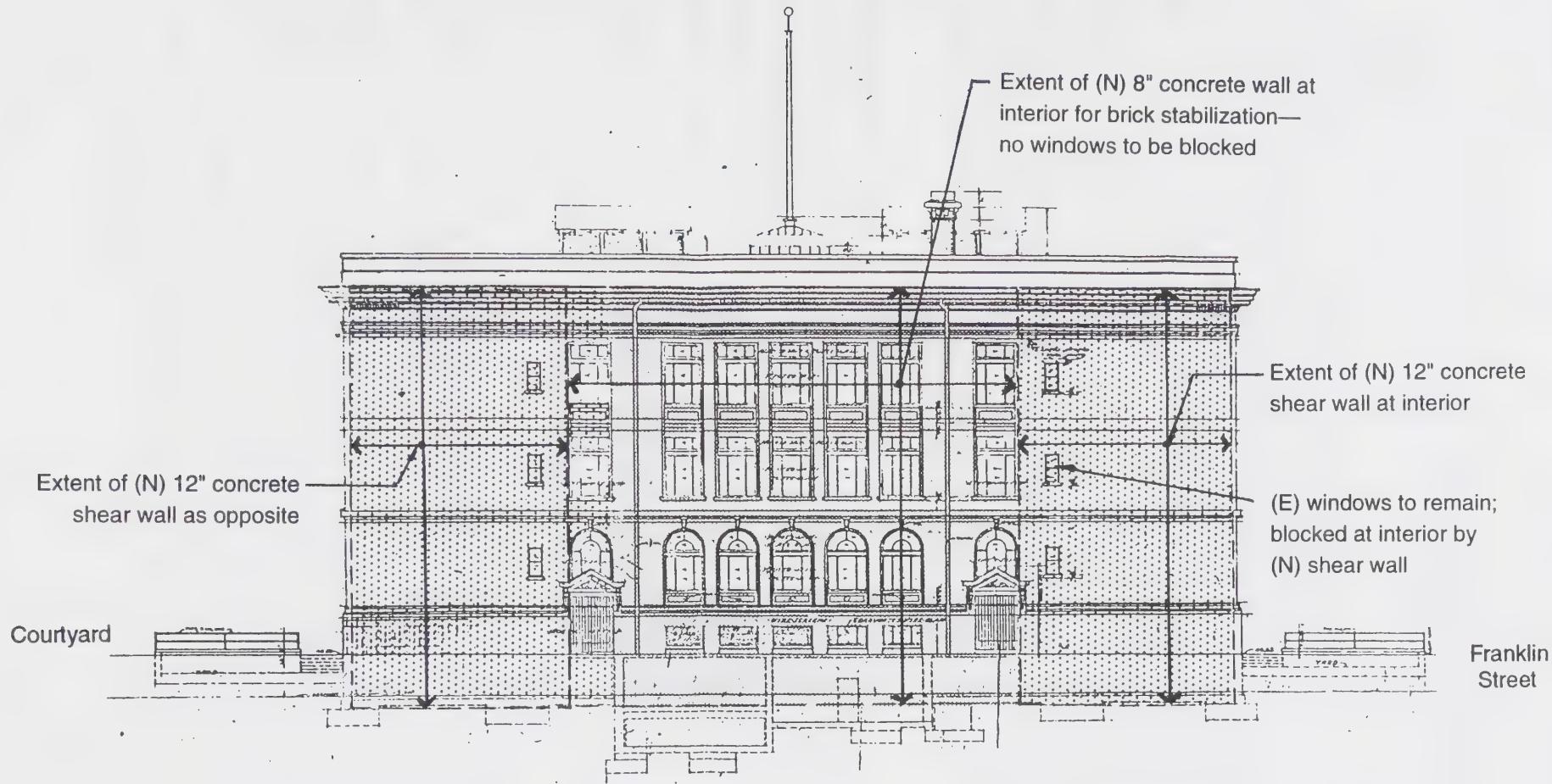
of existing windows would nevertheless be blocked at the interior (Figures 42 to 45, pages 6-39 to 6-42).

Those spaces identified as the most historically significant spaces within the building – the interior stairs and corridors, would be selectively retained and strengthened or reconstructed to match their original configurations and finishes. The existing elevator would also be retained and retrofitted, while existing toilet rooms would be entirely reconstructed, with first floor toilet rooms restored to match the historic originals. Perimeter office spaces would be open, without demising walls, utilizing instead open plan office systems. Heating, ventilating and electrical systems would be replaced with new systems and elements, excepting the reuse of selected light fixtures at interior corridors and stairs, and selected plumbing fixtures at first floor corridors and toilet rooms if feasible. Handicap access ramps to the first level of the building would be required due to the six foot difference between the height of the first floor and the ground level.

Based on the architectural and structural recommendations for this alternative, the improvements to the 170 Fell Street building are estimated to cost approximately \$10.8 million, including architectural design, historic preservation, and structural and building systems upgrades.⁵ This cost estimate excludes costs related to sidewalk and landscape improvement, hazardous materials abatement, moveable classroom/office equipment, telecommunications and other wiring and cabling, construction management fees, and insurance, legal, and other miscellaneous expenses.

ENVIRONMENTAL IMPACTS

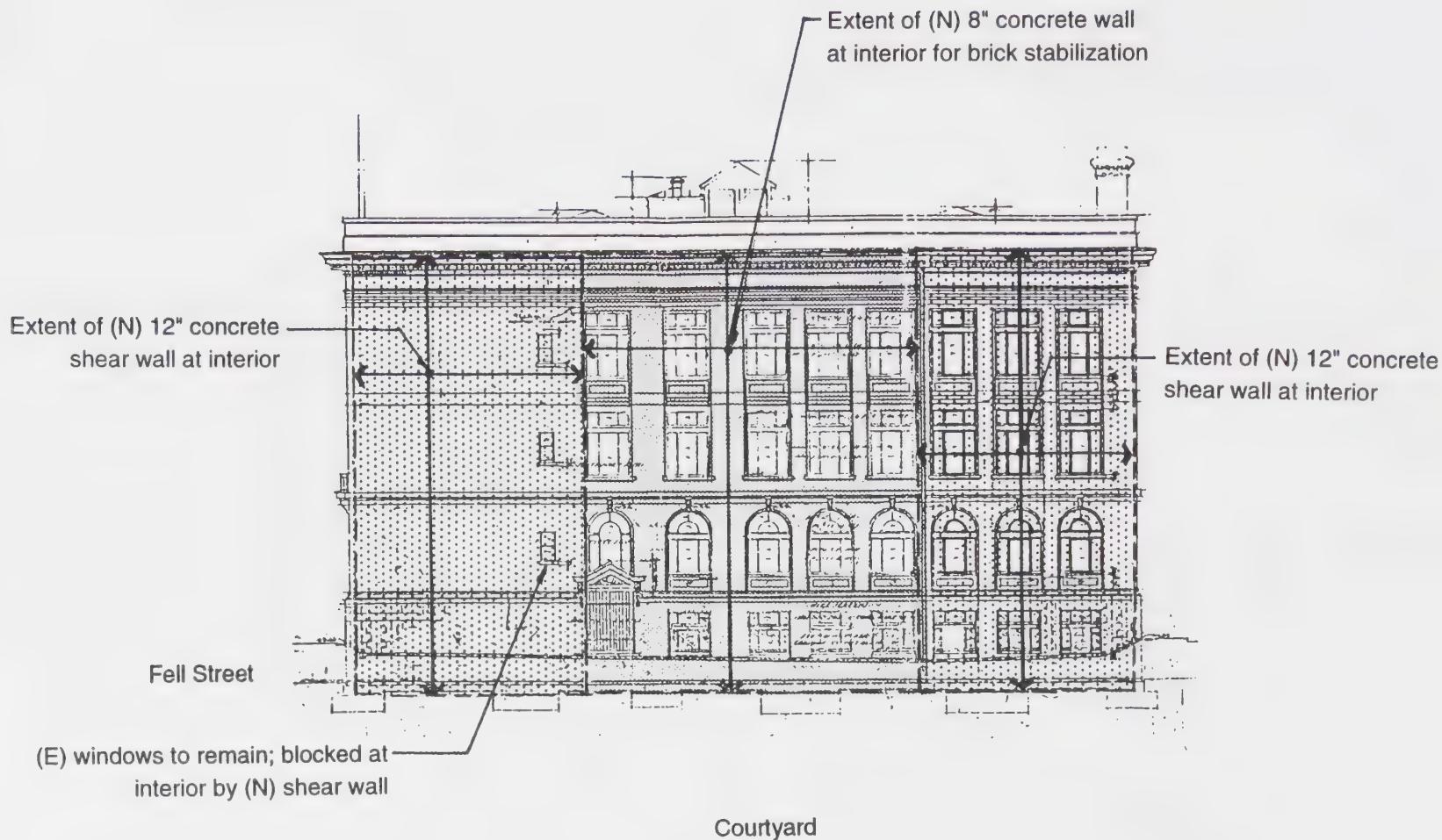
The potential environmental impacts of Alternative C would be similar to those of the proposed project, with two exceptions: under this alternative, the 170 Fell Street building would not be demolished, thereby eliminating the significant impact to an historic architectural resource that would occur under the proposed project and the project associated transportation impacts would be less. The building would be retained, structurally improved for conventional occupancy, and key historic architectural features would be rehabilitated and preserved.



Source: Degenkolb

ALTERNATIVE C: NORTH ELEVATION OF 170 FELL STREET BUILDING

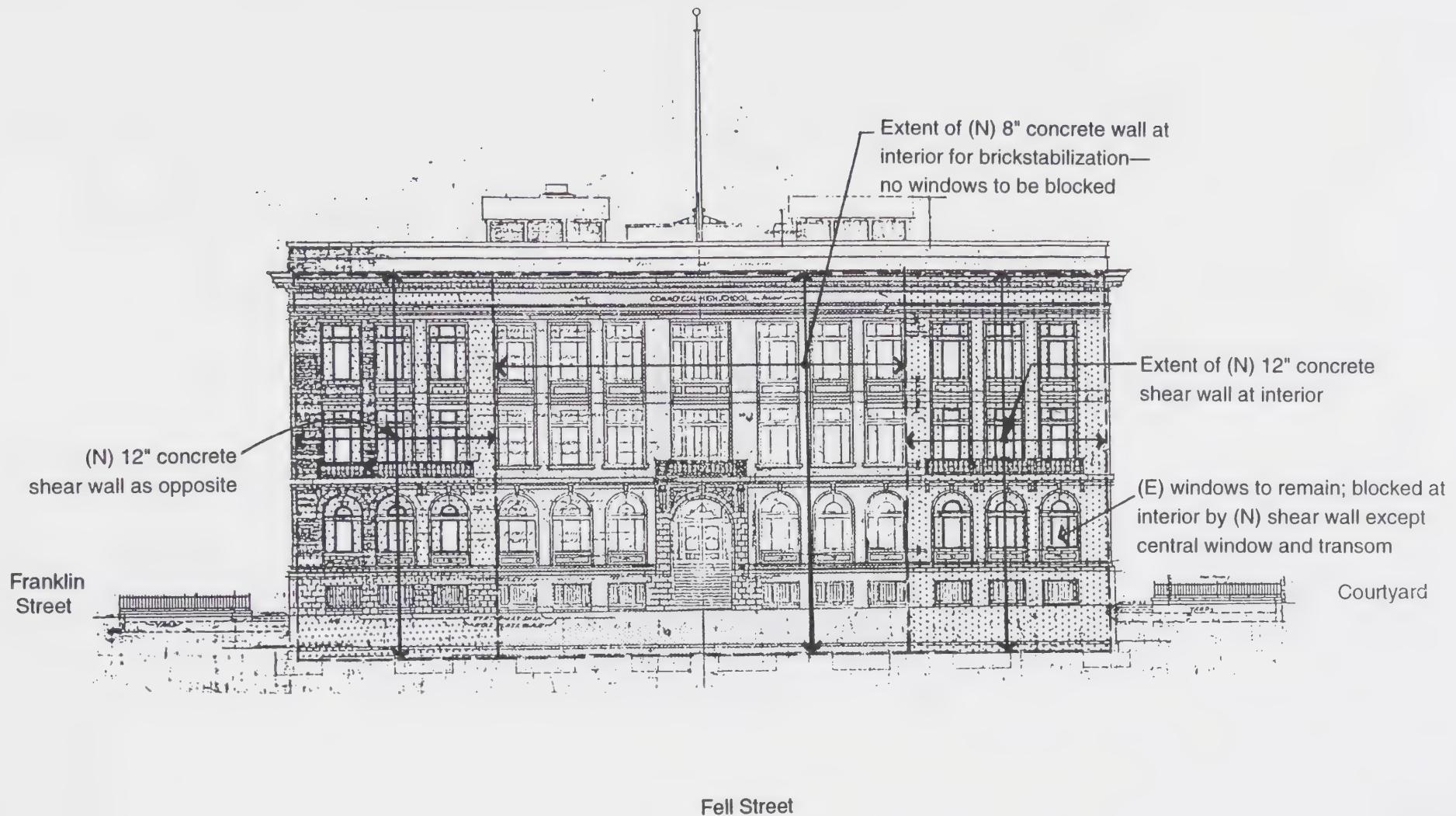
FIGURE 42



Source: Degenkolb

ALTERNATIVE C: EAST ELEVATION OF 170 FELL STREET BUILDING

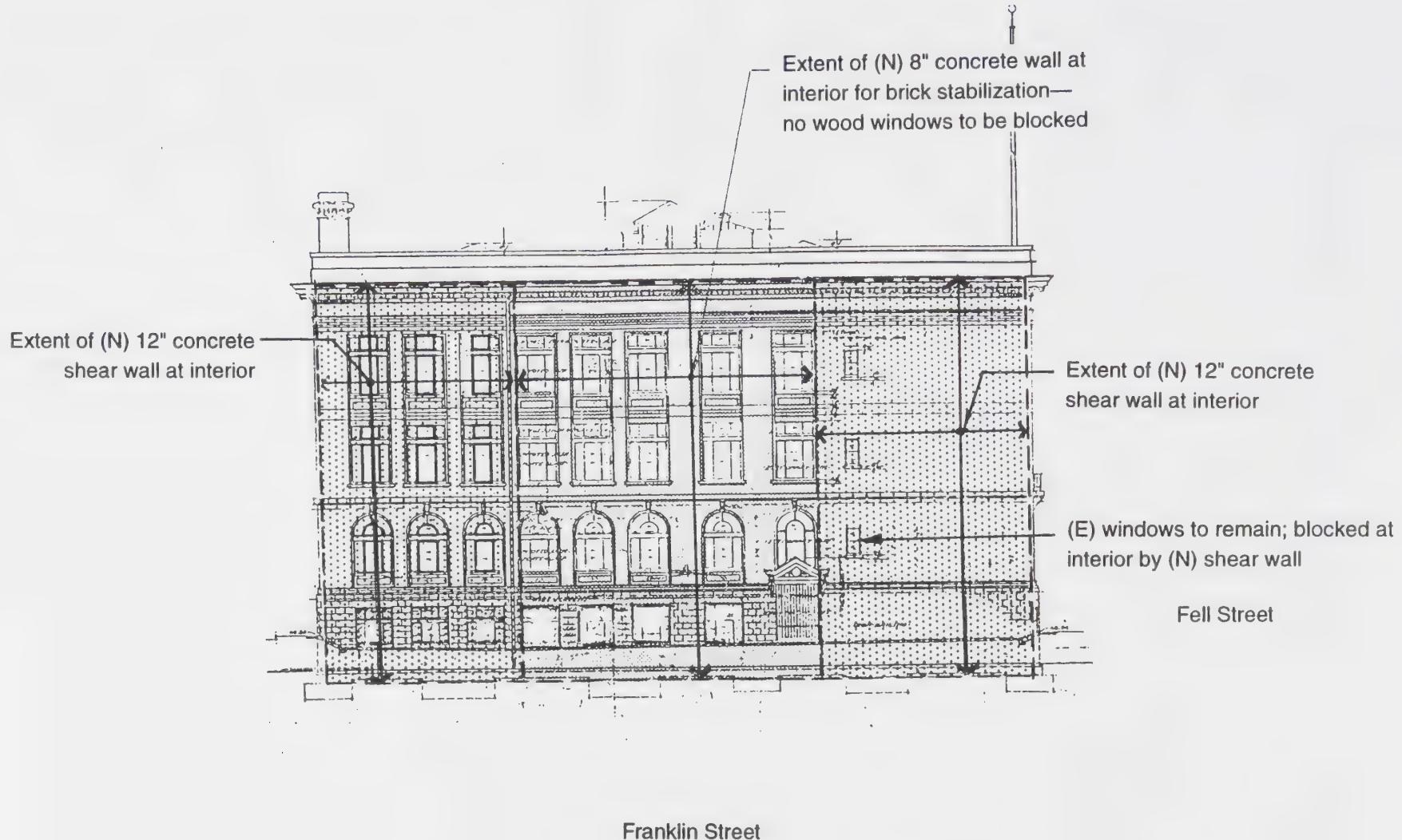
FIGURE 43



Source: Degenkolb

ALTERNATIVE C: SOUTH ELEVATION OF 170 FELL STREET BUILDING

FIGURE 44



Source: Degenkolb

ALTERNATIVE C: WEST ELEVATION OF 170 FELL STREET BUILDING

FIGURE 45

The Initial Study (Appendix A of this EIR) determined that the proposed project would not have significant impacts in the areas of land use, urban design, glare from nighttime lighting, population, noise, air quality and wind, utilities and public services, biology, geology and topography, water, energy, or hazards, and that further discussion of these topics in the EIR was unnecessary. This alternative would likewise not have significant impacts in these areas. This alternative would change the land use characteristics of the project site from administrative used in the 135 Van Ness Avenue building to an educational institution for performing arts. Under this alternative, all buildings on site would be retrofitted to meet current life safety requirements.

Under Alternative C, the 170 Fell Street building would be strengthened to comply with Section 3404.6 (formerly Section 104(f)) of the 1995 San Francisco Building Code. The structural strengthening scheme would include the addition of new reinforced concrete walls on the inside of the existing brick walls at the four corners of the building. These walls would be designed to carry the building's entire seismic lateral force. Foundation strengthening would be required beneath all new walls, and new plywood diaphragms at the roof and attic levels would be required. Chords and collectors would be added at eight locations per floor. Interior hollow clay tile at the corridors would be retained and strengthened to the maximum extent feasible.

Alternative C would be similar to the proposed project and Alternative B, by increasing the daily on-site population at the project site. However, under this alternative, the traffic circulation and parking impacts would result from office uses at the site, rather than exclusive use by students, faculty members and school visitors. Under this alternative, the project is anticipated to generate approximately 47 net new vehicle-trips during the weekday AM peak hour (47 inbound and 0 outbound), compared to the 485 net new vehicle-trips (285 inbound and 200 outbound) that would be generated by the proposed project or Alternative B.

Like the proposed project and Alternative B, vehicular traffic associated with Alternative C would be part of the cumulative increase in traffic on the regional facilities and local street network. Project traffic, however, would not contribute substantially to the cumulative conditions. Project traffic under Alternative C (as well as under the proposed project and Alternative B) would represent less than one percent of the total growth in AM peak hour vehicular traffic between 1990 and 2015. The contribution of the project (under the proposed project or Alternatives B

or C) to the regional bridges and freeways would be minimal, as the majority of the trips would be from locations within San Francisco and would use local streets to access the site.

REASONS FOR REJECTING THIS ALTERNATIVE

Alternative C would eliminate the significant impact to an historic architectural resource that would occur under the proposed project. It would not, however, meet the primary objectives of the project sponsor, namely the relocation and expansion of the School of the Arts.

NOTES - Alternatives

¹ Chapter 4, Setting, Impacts, and Mitigations of this DEIR provides information on the history and architectural significance of the Newton J. Tharp Commercial High School building located at 170 Fell Street. This section summarizes information contained in *Cultural Resource Evaluation, School of the Arts, San Francisco*, September 11, 1996, prepared by Page & Turnbull. The structural strengthening requirements for 170 Fell Street (both conventional occupancy (Alternative C of this EIR) and school occupancy (Alternative B of this EIR)) are analyzed in the letter report entitled *170 Fell Street, San Francisco, California, Analysis of Alternatives*, September 12, 1996, prepared by Degenkolb Engineers, which itself references other structural engineering reports of the 170 Fell Street building. Copies of these reports are on file and available for public review at the SFUSD Facilities Planning and Construction Department at 1551 Newcomb Avenue, San Francisco.

² This EIR, however, did review the potential air quality and noise impacts associated with the project. The analysis concluded that neither air quality nor noise would be adversely affected by the project.

³ Adamson Associates, *Statement of Probable Construction Cost, Feasibility Cost Plan*, August 6, 1996, and *Conceptual Cost Study*, January 24, 1997 and July 30, 1997 . Copies of those reports are on file and available for public review at the SFUSD Facilities Planning and Construction Department at 1551 Newcomb Avenue, San Francisco.

⁴ Ibid

⁵ Ibid.

7. DRAFT EIR DISTRIBUTION LIST

A. DRAFT EIR DISTRIBUTION LIST

FEDERAL AND STATE AGENCIES

State of California

Department of Parks and Recreation

Office of Historic Preservation

1416 - 9th Street

Sacramento, CA 94296

Attn: Hans Kreutzberg

State Office of Intergovernmental

Management (10)

State Clearinghouse

1400 - 10th Street

Sacramento, CA 95814

Federal Emergency Management Agency

Region IX, Disaster Closeout Center

Building 103, Post Office Box 29902

Presidio of San Francisco

San Francisco, CA 94129-1250

Attn: Sandro Amaglio

REGIONAL AGENCY

Association of Bay Area Governments

P.O. Box 2050

Oakland, CA 94604

Attn: Sally Germain

SAN FRANCISCO BOARD OF EDUCATION

135 Van Ness Avenue, Room 120

San Francisco, CA 94102

Attn: Ester V Casco, Executive Assistant

Keith Jackson, President

Carlota Del Portillo,

Ed.D. Vice President

Dan Kelly, M.D.

Jill Wynns

Steve Phillips

Mary Hernandez

Juanita Ownes, Ph.D

CITY AND COUNTY OF SAN FRANCISCO

San Francisco City Planning Commission
1660 Mission Street
San Francisco, CA 94103

Attn: Linda Avery, Secretary
Hector Chinchilla, Vice President
Dennis J. Antenore
Cynthia Joe
Richard Hills
Beverly Mills
Lawrence B. Martin
Anita Theoharis

San Francisco Dept. of Parking & Traffic
Traffic Engineering Division
25 Van Ness Avenue
San Francisco, CA 94102
Attn: Bond Yee

Landmarks Preservation Advisory Board
1660 Mission Street
San Francisco, CA 94103
Attn: Mark Paez, Secretary
Daniel Reidy, President
Donna Levitt, Vice-President
Alicia Bercerril
Ina Dearman
Paul Finwall
Jeremy Kotas
Nancy Ho-Belli
Penney Magrane
Suheil Shatara

Department of Building Inspection
1660 Mission Street
San Francisco, CA 94103
Attn: Frank Chiu

Police Department, Planning Division
Hall of Justice
850 Bryant Street
San Francisco, CA 94103
Attn: Lt. James Molinari

San Francisco Fire Department
Division of Planning & Research
260 Golden Gate Avenue
San Francisco, CA 94102
Attn: Howard L. Slater

San Francisco Municipal Railway
MUNI Planning Division
949 Presidio Avenue, Room 204
San Francisco, CA 94115
Attn: James Lowe

Water Department, Distribution Division
425 Mason Street
San Francisco, CA 94102
Attn: Hans Bruno, Assistant Manager

San Francisco Department of Public Works
Division of Streets and Mapping
875 Stevenson Street, Room 465
San Francisco, CA 94103
Attn: Denise Brady

GROUPS AND INDIVIDUALS

AIA
San Francisco Chapter
130 Sutter Street
San Francisco, CA 94104
Attn: Bob Jacobvitz

Heritage
2007 Franklin Street
San Francisco, CA 94109
Attn: David Bahlman

G. Bland Platt
362 Ewing Terrace
San Francisco, CA 94118

San Francisco Beautiful
41 Sutter Street, #709
San Francisco, CA 94104
Attn: Donna Casey, Exec. Director

San Francisco Building & Construction
Trades Council
2660 Newhall Street, #116
San Francisco, CA 94124-2527
Attn: Stanley Smith

San Francisco Chamber of Commerce
465 California Street
San Francisco, CA 94104

San Francisco Labor Council
 550 Howard Street
 San Francisco, CA 94105
Attn: Walter Johnson

SPUR
 312 Sutter, Suite 500
 San Francisco, CA 94108

Sierra Club
 730 Polk Street
 San Francisco, CA 94109

James W. Haas
 Chair
 Civic Pride!
 633 Battery Street, 5th Floor
 San Francisco, CA 94111

James Chappell
 Executive Director
 SPUR
 312 Sutter Street
 Suite 500
 San Francisco, CA 94108

Jennifer Clary
 President
 San Francisco Tomorrow
 54 Mint Street #310
 San Francisco, CA 94103

President
 Coalition for S.F. Neighborhoods
 628 Ashbury Street
 San Francisco, CA 94117

Joe O'Donoghue
 President
 Residential Builders Assn. of S.F.
 1212 Market Street
 Suite A
 San Francisco, CA 94102

MEDIA

Associated Press
 1390 Market Street, Suite 318
 San Francisco, CA 94102
Attn: Bill Shiffman

Leland S. Meyerzone
 KPOO - FM
 P.O. Box 6149
 San Francisco, CA 94101

San Francisco Bay Guardian
 2700 - Nineteenth Street
 San Francisco, CA 94110
Attn: Patrick Douglas, City Editor

San Francisco Business Times
 275 Battery Street
 Suite 940
 San Francisco, CA 94111
Attn: Tim Turner

San Francisco Chronicle
 925 Mission Street
 San Francisco, CA 94103
Attn: Elliot Diringer

San Francisco Examiner
 P.O. Box 7260
 San Francisco, CA 94120
Attn: Gerald Adams

The Sun Reporter
 1366 Turk Street
 San Francisco, CA 94115

Tenderloin Times
 290 Turk Street
 San Francisco, CA 94102
Attn: Editor

LIBRARIES

Document Library (Two Copies)
 City Library - Civic Center
 San Francisco, CA 94102
Attn: Faith Van Liere

Stanford University Libraries
 Jonsson Library of Government
 Documents
 State & Local Documents Division
 Stanford, CA 94305

Government Publications Department
 San Francisco State University
 1630 Holloway Avenue
 San Francisco, CA 94132

Hastings College of the Law - Library
200 McAllister Street
San Francisco, CA 94102-4978

Institute of Government Studies
109 Moses Hall
University of California
Berkeley, CA 94720

**ADJACENT PROPERTY OWNERS &
TENANTS**

Leona Tarantino
PO Box 471661
San Francisco, CA 94147

Mr. and Mrs. Kwang Chiu
1390 Summit Park Lane
El Cerrito, CA 94530

Cal State Automobile Ass.
150 Van Ness Avenue
San Francisco, CA 94102-5208

M. King/Gertrude King
231 Franklin Street
San Francisco, CA 94102-5113

333 Franklin Plaza LTD
210 Fell Street
San Francisco, CA 94102-5113

Fell/Franklin Corp
414 Mason Street #703
San Francisco, CA 94102

Mr. and Mrs. Melvin Dagovitz
7 Quail Ridge
Kentfield, CA 94904-2623

Mr. and Mrs. Dahyabhai Patel
P.O. Box 590609
San Francisco, CA 94159-0609

Taylor Family Trust
P.O. Box 441
Murphys, CA 95247

Angeline Chevalier Etal
167 Somerset Street
San Francisco, CA 94134-1443

Greg Snazelle Etal
155 Fell Street
San Francisco, CA 94102-5106

East West Investors IV
400 Pacific Avenue
San Francisco, CA 94133-4622

Anthon Rasmussen Etal
621 Alta Vista Drive
Sierra Madre, CA 91024-1413

CA State Empl Credit Union #2
6507 4th Avenue
Sacramento, CA 95817

Herbst Foundation Inc.
3 Embarcadero CTR 21st Fl
San Francisco, CA 94111

San Francisco Symphony
201 Van Ness Avenue
San Francisco, CA 94102

8. EIR AUTHORS AND CONSULTANTS; ORGANIZATIONS AND PERSONS CONSULTED

EIR AUTHORS

San Francisco Unified School District
1551 Newcomb Avenue
San Francisco, CA 94124
Tim Tronson
Cheryl Gaston, Project Manager

EIR CONSULTANTS

During Associates
120 Montgomery Street, Suite 2290
San Francisco, CA 94104
Stu During, Project Manager
Steven Appleton, Planner
Doug Herring, Planner
Lynne LeRoy, Word Processor

Don Ballanti (Air Quality)
Certified Meteorologist
1424 Scott Street
El Cerrito, CA 94530

Clement Designs (Graphics Design)
358 3rd Avenue, Suite 100
San Francisco, CA 94118
Kathy Clement
Hanna Norman

Korve Engineering, Inc. (Transportation)
155 Grand Avenue, Suite 400
Oakland, CA 94612
Chi-Hsin Shao
Linda Lee
Luba Wyznyckyj

8. EIR Authors and Consultants;
Organizations and Persons Consulted

Page & Turnbull (Historic Preservation Resources)
724 Pine Street
San Francisco, CA 94108
Jay Turnbull,
Mark Hurlbert

Square One Productions (Photography and Photomontages)
725 Filbert Street
San Francisco, CA 94133
Hartmut Gerdes

Illingworth & Rodkin, Inc. (Acoustics)
85 Bolinas Road, #11
Fairfax, CA 94930
Richard Illingworth
Rich Rodkin

PROJECT ATTORNEYS

Alice Suet Yee Barkley
Attorney at Law
30 Blackstone Court
San Francisco, CA 94123

Bob McCarthy
655 Montgomery Street
17th Floor
San Francisco, CA 94111

PROJECT ARCHITECTS

Gordon H Chong + Associates
Powell and Partners
Castro-Blanco, Piscioneri and Associates
130 Sutter Street, Suite 300
San Francisco, CA 94104
Michael Wilson
Amy Elliot
Bryan Shiles

ORGANIZATIONS AND PERSONS CONSULTED

City and County of San Francisco
Municipal Railway
James Lowe

Department of Parking and Traffic
Jerry Robbins

City Planning
Larry McDonald
Vincent Marsh
Mark Paez

San Francisco Landmark Advisory Board

Others

California Office of Historic Preservation
Hans Kreutzberg
Steade Craig

Foundation for San Francisco's Architectural Heritage
David Bahlman
Susan Brandt-Hawley

Federal Emergency Management Agency
Sandro Amaglio
Eric Rekdahl
John Lee
Jane Lehman

State Office of Emergency Services
Edward Richardson
Thomas Ottoman
Jamal Madani

G. Bland Platt

Albert Lanier

Ruth Asawa

9. APPENDICES

Appendix A: Initial Study

Appendix B: Architectural Resources

Appendix C: Transportation

Appendix D: Air Quality

**NOTICE THAT AN
ENVIRONMENTAL IMPACT REPORT
IS DETERMINED TO BE REQUIRED**

Date of this Notice: May 31, 1996

Lead Agency: San Francisco Unified School District
135 Van Ness Avenue, San Francisco, CA 94102

Agency Contact Person: Cheryl Gaston **Telephone:** (415) 695-5763
San Francisco Unified School District
Project Manager, Facilities Management and Operations
1551 Newcomb Avenue
San Francisco, CA 94124-1234

Project Title: School of the Arts Project

Project Sponsor: San Francisco Unified School District

Project Contact Person: Cheryl Gaston, Facilities Management & Operations

Telephone: (415) 695-5763

Project Address: 135 Van Ness Avenue (the Block generally bounded by Van Ness Avenue to the east, Fell Street to the south, Franklin Street to the west, and Hayes Street to the north).

Assessor's Block and Lots: Block 815, lot 1

City and County: San Francisco

Project Description: The proposed project would be the renovation of the 135 Van Ness Avenue complex and the Nourse Auditorium, the demolition of the existing building and construction of a new 67,000 sq.ft. building at 170 Fell Street for the School of the Arts.

THIS PROJECT MAY HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT AND AN ENVIRONMENTAL IMPACT REPORT IS REQUIRED. This determination is based upon the criteria of the Guidelines of the State Secretary for Resources, Section 15063 (Initial Study), 15064 (Determining Significant Effect), and 15065 (Mandatory Findings of Significance), and the following reasons, as documented in the Environmental Evaluation (Initial Study) for the project, which is attached. The Environmental Impact Report will meet the requirements of the California Environmental Quality Act (CEQA).

Deadline for Filing of an Appeal of this Determination to the San Francisco Unified School District: June 11, 1996.

An appeal requires a letter specifying the grounds for the appeal.



Tim Tronson,
Environmental Review Officer

THE SAN FRANCISCO SCHOOL OF THE ARTS INITIAL STUDY

I. PROJECT DESCRIPTION:

The San Francisco Unified School District proposes to expand the School of the Arts (SOTA) on Font Boulevard and to relocate the school to the block that currently contains the School District Headquarters at 135 Van Ness Street (Figure 1, page 3). The new school would also serve as a resource for art programs of the entire school district.

Project Site

The project site is the block bounded by Van Ness Avenue, Hayes Street, Franklin Street, and Fell Street. This block contains three buildings: 135 Van Ness Avenue, The Nourse Auditorium, and 170 Fell Street. These three existing buildings form an interior court which is currently used for parking for approximately sixty automobiles. Vehicular access is from Franklin Street. The entire block is within the City designated Civic Center Historic District.

135 Van Ness Avenue Building fronts on Van Ness Avenue and extends the full length between Fell and Hayes Streets. The building was part of the old Commerce High School and is a U-shaped structure, constructed in 1926, with the one-story Library Wing facing Fell Street and the two-story Gymnasium Wing facing Hayes Street. Presently occupied by the School District administrative staff, the building was designated as City Landmark No. 140 on December 6, 1981. The gymnasium was severely damaged during the Loma Prieta Earthquake in 1989, and has remained vacant.

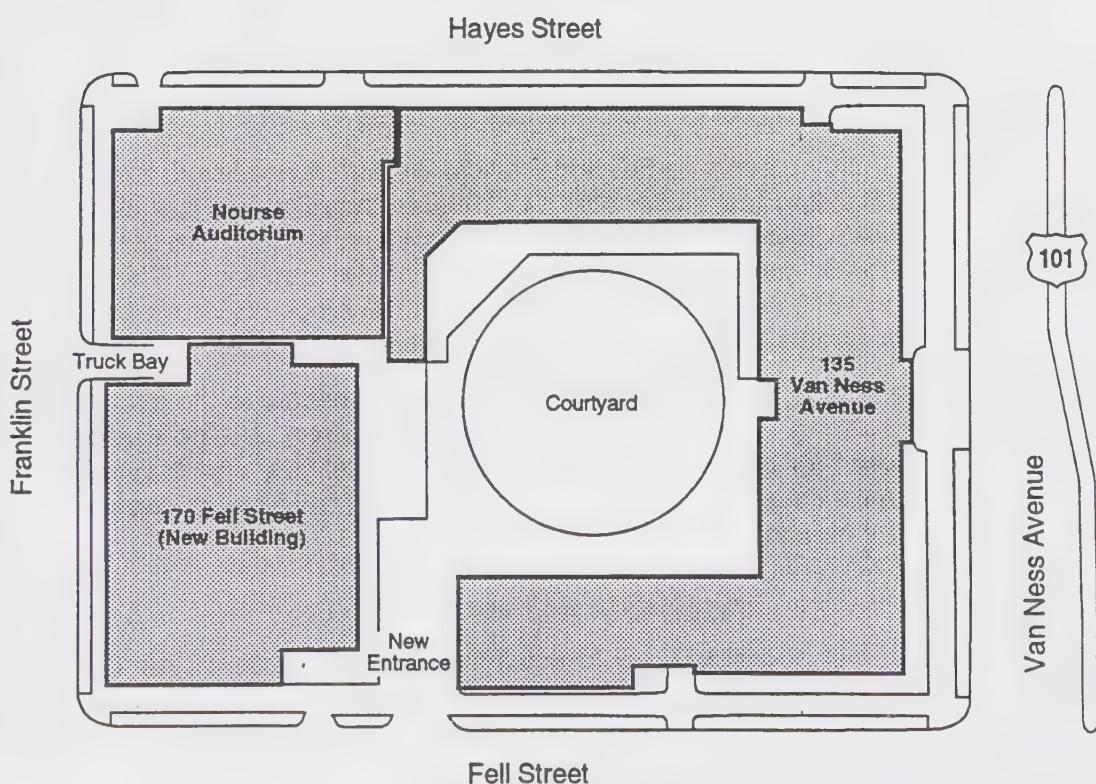
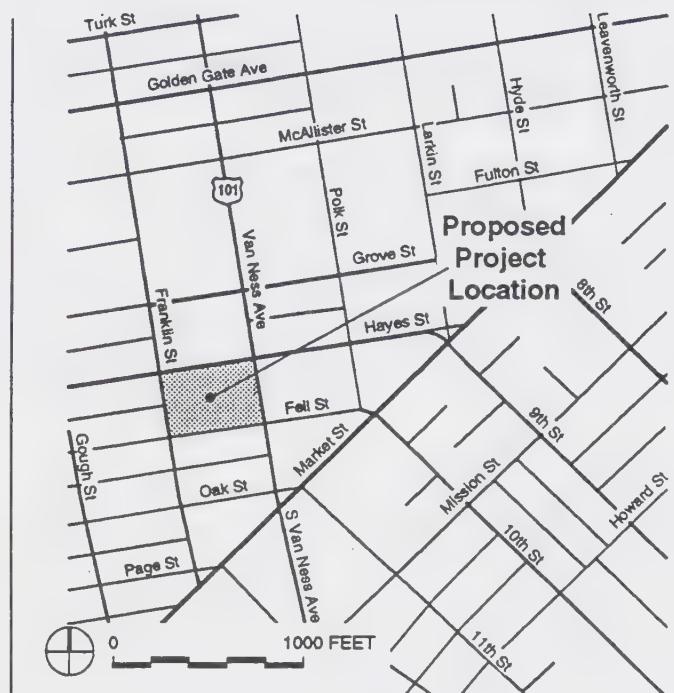
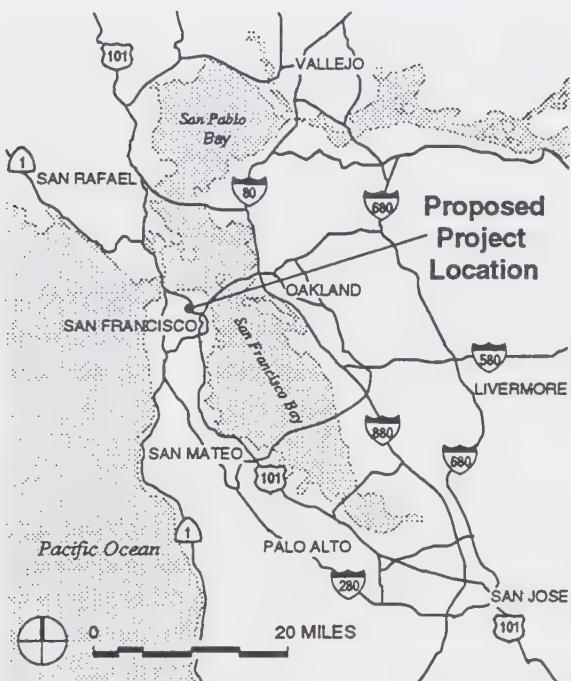
170 Fell Street Building fronts on Fell and Franklin Streets. It was condemned by the City Department of Building Inspection after the 1989 earthquake and has since remained vacant. The approximately 67,000 square foot four-story, steel framed building contains a unreinforced brick facade and hollow core tile interior partitions. The building was originally built in 1910 as a school in the middle of the block on Grove Street between Larkin and Polk Streets and was moved to its present site in 1913.

The Nourse Auditorium fronts on Hayes Street and is connected to the gymnasium of the 135 Van Ness Building. It can be accessed from Hayes Street and the interior courtyard. It is presently used for opera rehearsal and other productions, and is available for rent by private organizations. The auditorium has about a 1,900 seat capacity and was formerly used for meetings of the SFUSD Board.

Proposed Project

The proposed new School of the Arts would entail the adaptive reuse of the 135 Van Ness Avenue, City designated Landmark Building, and the Nourse Auditorium, and the demolition of the existing 170 Fell Street Building and the construction of a new structure of similar size. The central courtyard would be redesigned to provide a landscaped gathering space for students. The main entrance to the complex would be from Fell Street between the new 170 Fell Street Building and the existing 135 Van Ness Avenue Building.

The current administrative staff of the SFUSD would be relocated into other SFUSD owned or leased space. Renovation of the 135 Van Ness Building would include seismic retrofit and other upgrades to bring these buildings into compliance with applicable State law governing construction of schools. The Nourse Auditorium would also be renovated. The new building at



Source: During Associates, after Gordon H Chong

170 Fell Street will be similar in size, scale and height to the demolished 170 Fell Street Building. No off-street parking is proposed for the project.

The 135 Van Ness Building would be the main SOTA classroom building for the arts and academic classes with no dedicated spaces for any particular subject. The gymnasium space would be used as studios and other art activities that require large volume space. The Nourse Auditorium would be dedicated to arts presentations for the entire school district and for SOTA students to be educated in subjects related to Theater arts. The new 170 Fell Street Building would be the Center for Arts Education for the training of all teachers in the school system, and would have additional studios, classrooms, galleries for displaying works of students and professionals, and dressing rooms and other supportive functions for the Nourse Auditorium.

When the project is completed in 1998, the new SOTA complex would provide an expanded capacity for up to a maximum of 1,000 students.

School Of The Arts

SOTA was established in 1981 and was located at McAteer High School for ten years. In 1991, SOTA became a separate high school. SOTA is a magnet school, which serves the entire Bay Area. Currently, SOTA is housed in an old surplus elementary school on Font Street adjacent to San Francisco State University. SOTA currently has approximately 400 students, who are selected through an audition process, and about 57 faculty. An academic high school, over 90 percent of the graduating SOTA students proceed to college or universities. The school year generally runs from September to June. Classes begin at 8:00 a.m. and end at 3:00 or 4:00 p.m., depending on the particular class. Morning classes are devoted to the academic and the afternoon classes focus on the arts. The six major art disciplines are Band, Orchestra, Choir/Piano, Dance, Drama, and Visual Arts. Two minor disciplines are Media and Theater Techniques (lighting, set design, sound, etc.).

The new SOTA campus would also serve as a resource for the arts for the entire school district to enhance the arts skills of the district teachers. In addition to individual artists, institutions such as the San Francisco Symphony, would hold teaching positions at SOTA. SOTA students would participate in community services and serve as resources to other district schools.

II. SUMMARY OF POTENTIAL ENVIRONMENTAL EFFECTS

A. EFFECTS FOUND TO BE POTENTIALLY SIGNIFICANT

The SOTA project is examined in this Initial Study to identify its potential effects on the environment. Some potential effects have been determined to be potentially significant, and will be analyzed in an environmental impact report (EIR). These potential effects include effects to architectural and historic resources, effects related to transportation issues, and transportation-related air quality. For informational purposes, the EIR will also discuss land use.

B. EFFECTS FOUND NOT TO BE SIGNIFICANT

The following potential effects were determined either to be insignificant or to be mitigated through measures included in the project. These items are discussed in Section III below, and require no further environmental analysis in the EIR:

Land Use: The proposed project would change and intensify the land uses on the project site, however, the intensity of the proposed uses would be similar to the existing uses on Van Ness

Avenue and Civic Center area.

Urban Design: The proposed new building at 170 Fell Street site would be of comparable scale, size, and massing to the existing building and would use exterior finish materials intended to be compatible with the landmark 135 Van Ness building. The project's new construction in relation to the landmark structure and the Civic Center Historic District will be discussed in the architectural and historic resources sections in the EIR.

Glare: The project would not use mirrored glass. Exterior lighting would be directed or shielded to prevent glare on adjacent properties and streets.

Population: The project site is currently occupied by the administrative offices of the Unified School District (170 Fell Street, and the gymnasium wing of the 135 Street Building are currently vacant). The school district administration would be relocated to other existing office space. There would be an intensification of use on the site. Following project completion, it is estimated that the SOTA student body would consist of approximately 1,000 students and 150 faculty and staff. While noticeable to immediately adjacent neighbors, this increase would not substantially increase the existing areawide population.

Noise: After completion, building operation including project-related activities and project-related traffic would not perceptibly increase noise levels in the vicinity. Some increase in noise and vibration could be expected during construction. The project would comply with the San Francisco Noise Ordinance during construction and regarding mechanical equipment noise.

Air Quality and Wind: Construction activities could cause a temporary violation of ambient air quality standards in the site vicinity. A measure to mitigate potentially significant air-quality impacts associated with excavation and construction activities is included as part of the project. (See page 20). There would be no change in the wind conditions on the project site.

Utilities/Public Service: The project would increase the demand for public utilities and services, but not in excess of amounts expected and provided for in the area.

Biology: The project site is almost entirely covered by impervious surfaces and is within an urban area which has been intensively developed since the late-nineteenth century. No rare or endangered plants or animals would be affected by the project.

Geology/Topography: No excavation is proposed for the project in addition to footings for the new building at 170 Fell Street. A soils investigation and foundation and related structural design studies would be prepared by a California-licensed engineer prior to commencement of construction. The San Francisco Unified School District and contractor would follow the recommendations of the final report regarding any excavation and construction of the project.

Water: The project site is almost entirely covered by impervious surfaces. The project would not change the existing pattern of runoff during the rainy season and would be designed to improve existing drainage conditions on the site.

Energy: The project would be constructed to comply with performance standards of Title 24 of the California Code of Regulations, regarding energy conservation.

Hazards: The project would demolish the 170 Fell Street building and would seismically retrofit the 135 Van Ness Building. The existing buildings contain lead based paint (LBP), asbestos containing building materials (ACBMs), and polychlorinated biphenyls (PCBs) may also be in the light fixtures. The San Francisco Unified School District would be required to comply with

applicable regulations regarding the removal and disposal of LBP, ACBMs and PCBs. These regulations and procedures would ensure that any potential impacts due to asbestos would be reduced to a level of insignificance. Potential hazardous wastes associated with demolition of the 170 Fell Street building were investigated and mitigation measures are included in the project that would reduce any remaining potential contamination to a level of insignificance.

III. ENVIRONMENTAL EVALUATION CHECKLIST

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
1. <u>Land Use and Planning</u> . Would the proposal:				
a) Conflict with general plan designation or zoning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be incompatible with existing land use in the vicinity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible land uses)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed SOTA project is under the jurisdiction of the San Francisco Unified School District (SFUSD). The SFUSD has adopted a resolution (Number 59-12W3, August 30, 1995) exempting the project from the jurisdiction of the City and County of San Francisco. Therefore it is not required to comply with the City of San Francisco *Master Plan, Planning Code and Zoning* regulations. The project would be an adaptive reuse of the existing three-story 135 Van Ness Avenue building and the replacement of the four-story 170 Fell Street building. The project construction would be undertaken in compliance with applicable State law governing construction of schools. The adaptive reuse of a Landmark building would be undertaken in compliance with *Secretary of the Interior's Standards for the Treatment of Historic Properties*, 1992 (the Secretary's Standards).'

Environmental plans and policies are those, like the Bay Area Air Quality Plan, which directly address physical environmental issues and/or contain targets or standards which must be met in order to preserve or improve characteristics of the City's physical environment. The current proposed project would not obviously or substantially conflict with any such adopted environmental plan or policy.

Because the project would be accomplished within the existing block and street configuration, it would retain and would not disrupt or divide the physical arrangement of an established community. The project site currently contains the administrative offices of the San Francisco Unified School District. The surrounding area is generally a mix of uses. Buildings near the project range from one to more than twelve stories. Uses adjacent to the site include residential, office, retail/commercial and the City's performance arts center. Most uses include full lot coverage. The site is on the south west edge of the Civic Center complex; the center of municipal, state and federal government offices, the City library, the state and federal courts, the proposed Asian Arts Museum, and the performance arts buildings (the opera house, the ballet school, Herbst auditorium, Bill Graham Civic Auditorium and Davies Symphony Hall.)

The replacement of the administrative offices of the school district by a school of performing arts would revert the site to its historic use as a school. The proposed change and intensification of use of the site would be noticeable especially in the near vicinity, and would change the character of the site. The intensity of uses proposed with the project would be similar to existing uses along Van Ness Avenue, especially the Civic Center area. This project would extend the City's performance arts center. For this reason, the proposed project could not have a substantial impact on the existing character of the vicinity. Physical impacts of the proposed intensification of use, primarily transportation and air quality, will be discussed by topic in the EIR.

Although the potential effect of the project on land use and on the neighborhood character of the Van Ness Avenue, Franklin, Fell and Hayes Streets Area requires no further analysis for CEQA purposes, it will be discussed in the EIR for informational purposes.

NOTES - Land Use and Planning

¹ U.S. Department of the Interior, National Park Service, Preservation Assistance Division, Washington D.C., *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, 1992.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
2. Population and Housing. Would the proposal:				
a) Cumulatively exceed official regional or local population projections?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace existing housing, especially affordable housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The 135 Van Ness Avenue building on the project site is currently used as administrative offices for the school district. The 170 Fell Street building and the gymnasium wing of the 135 Van Ness Avenue building have been vacant since 1989 following the Loma Prieta Earthquake. Succeeding project construction, the daily population of the site would include students, faculty, support staff and visitors. The increase in population on site would be noticeable and would probably be localized in the project area, but would not substantially increase the existing permanent area-wide population. The majority of persons on the site would be students who are residents of San Francisco. Physical environmental effects of this increase in population on the site will be addressed in the EIR by topic, primarily in the areas of transportation and air quality.

Maximum use of the project could involve about 1,000 students and 150 faculty and support staff. The project would not displace any existing dwelling units. There would be up to a maximum of about 1,150 persons at the site during peak-use times (the Nourse Auditorium could seat around 1,900 people for special presentations). It is anticipated that the new employment opportunities would be filled by the existing labor pool. Therefore, the project would not create a substantial new demand for additional housing in San Francisco. No further analysis of population and housing is required in the EIR.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

3. Geologic Problems. Would the proposal result in or expose people to potential impacts involving:

- a) Fault rupture?
- b) Seismic ground shaking?
- c) Seismic ground failure, including liquefaction?
- d) Seiche, tsunami, or volcanic hazard?
- e) Landslides or mudflows?
- f) Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill?
- g) Subsidence of the land?
- h) Expansive soils?
- i) Unique geologic or physical features?

There would minimal excavation on the project site. The new building at 170 Fell street could require minor excavation for the foundation. A geotechnical study has not yet been conducted for the project. A detailed geotechnical report would be prepared by California-licensed geotechnical engineer prior to commencement of construction. The project sponsor and contractor would follow the recommendations of the final report regarding any excavation and construction for the project.

The building contractor must comply with the Excavation Standards of the California Occupational Safety and Health Agency during demolition and removal of the 170 Fell Street building and the interior demolition of the 135 Van Ness Building Wing. There would be an increase of population on the site with the project than with its former and current uses. The project would be constructed to meet the current seismic engineering standards of the *State Building Code for Schools* that is proscribed by the Field Act which contain more stringent seismic safety requirements than the *San Francisco Building Code*. The proposed project would include rehabilitation of the existing 135 Van Ness Avenue building and the Nourse Auditorium, the demolition of the 170 Fell Street building and construction of a new building there on the 170 Fell Street property. The new building and the retrofitted 135 Van Ness Avenue building would meet current seismic and fire safety requirements, whereas the existing buildings do not. The project would provide maximum feasible protection for the students, faculty and support staff. While the project would expose more persons than at present to earthquake hazards in the project area, the 135 Van Ness Avenue building would be seismically retrofitted and the new building at 170 Fell Street would comply with current seismic and life safety requirements.

In view of the above, there would not be significant impacts from the project related to geology.

The closest active faults to San Francisco are the San Andreas Fault, about 9 miles southwest of the site; the San Gregorio Fault, about 12.5 miles southwest of the site; and the Hayward and Calaveras Faults,

The closest active faults to San Francisco are the San Andreas Fault, about 9 miles southwest of the site; the San Gregorio Fault, about 12.5 miles southwest of the site; and the Hayward and Calaveras Faults, about 15 and 30 miles east of the site, respectively. The northern segment of the San Andreas fault is capable of generating a maximum credible earthquake (MCE¹) of Richter magnitude M8.3²; the San Gregorio, MCE of 7.25; and the Hayward and the Calaveras faults, MCEs of M7.5.³ Earthquakes of these magnitudes are sufficient to create ground accelerations greater than 0.5g (50 percent of the acceleration of gravity⁴) in bedrock and in unconsolidated sediments - severe enough to cause major damage to structures, foundations and underground utility lines.⁵

After the 1989 Loma Prieta earthquake, the United States Geological Survey estimated the probability of at least one large earthquake (M7 or greater) in the San Francisco Bay Region within the 30 year period between 1990 and 2020 at about 67 percent.⁶ Recent studies by the United State Geological Survey indicate, unofficially that the probability may be about 90 percent.⁷ On the San Francisco Peninsula segment of the San Andreas fault, the probability is estimated at about 23 percent that an M7 or greater earthquake would occur in this time frame.⁸ The project site is not in a Special Geologic Study Area as shown in the *Community Safety Element of the San Francisco Master Plan* that indicates areas in which one or more geologic hazards exists (such as landsliding and/or liquefaction).⁹ The project area would experience very strong ground-shaking in a major earthquake (Intensity Level C, masonry badly cracked with occasional collapse. Frame buildings lurched when on weak underpinning with occasional collapse).¹⁰ The site is not in an area susceptible to liquefaction or subsidence, nor is it within an area of potential tsunami or flooding.

Ground shaking from earthquakes similar to or smaller than the 1906 event (Richter magnitude M8.3) could topple unattached interior objects such as bookcases and furniture, and break or dislodge some windows, exterior panels, or cornices. Toppling interior objects could injure residents, workers or other inhabitants inside existing buildings; falling windows and facade material would be a hazard to pedestrians and vehicular traffic. Potential danger from aftershocks could cause the City to order some buildings or categories of buildings to be vacated until preliminary assessments of damage and vulnerability to aftershocks can be made by engineers.

A full description of potential effects and emergency response systems associated with a major earthquake are contained in the *Downtown Plan EIR*, which is incorporated herein by reference.¹¹ In general, it can be expected that communication and emergency access to individuals, and travel to and from the City, could be delayed for up to three days. San Francisco maintains an Office of Emergency Services which is charged with developing and coordinating the implementation of an Emergency Operation Plan and emergency response plans for specific areas or buildings in case of a disaster in the City. The Emergency Operation Plan contains an Earthquake Response Element, which establishes a system of care facilities and communications network. An evacuation and emergency response plan would be developed as part of the SOTA project in conformance with the San Francisco Unified School Districts and State Fire and Life Safety regulations for schools.

No further analysis of geology and seismicity is required in the EIR

NOTES - Geology

¹ Maximum credible earthquake (MCE): the largest Richter magnitude (M) seismic event that appears to be reasonably capable of occurring under the conditions of the presently known geological framework. In the Bay area, M8.3 is the maximum credible earthquake for the San Andreas fault and M7.5 for the Hayward and Calaveras faults.

² Richter magnitude scale: a logarithmic scale developed in 1935/36 by Dr. Charles F. Richter and Dr. Beno Gutenberg to measure earthquake magnitude by the amount of energy released, as opposed to earthquake intensity as determined by local effects on people, structures, and earth materials. Each whole number of Richter magnitude

(M) represents a 10-fold increase in the amplitude of the seismic waves recorded on a seismogram, and about a 31-fold increase in the amount of energy release by the earthquake.

³ Mualchin, L., and A.L. Jones, *Peak Acceleration from Maximum Credible Earthquakes in California (Rock and Stiff-Soil Sites)*, California Division of Mines and Geology, Open-File Report 92-1, 1992.

⁴ Horizontal ground acceleration: the speed at which soil or rock materials are displaced by seismic waves. It is measured as a percentage of the acceleration of gravity (0.5g = 50% of 32 feet per second squared). Peak horizontal ground acceleration is the maximum acceleration expected from the maximum credible earthquake (MCE) predicted to affect a given area. Repeatable acceleration refers to the acceleration resulting from multiple seismic shocks. Sustained acceleration refers to the acceleration produced by continuous seismic shaking from a single, long-duration event.

⁵ Mualchin, L., and A.L. Jones, *op.cit.*

Davis, J.F., J.H., Bennett, G.A. Borchardt, J.E. Kahle, S.J. Rice, and M.A. Silva, *Earthquake Planning Scenario for a Magnitude 8.3 Earthquake on the San Andreas Fault in the San Francisco Bay Area*, California Division of Mines and Geology, Special Publication 61, 1982.

⁶ Working group on California earthquake probabilities, *Probabilities of Large Earthquakes in the San Francisco Bay Region, California*, United States Geological Survey circular 1053, 1990, page 29.

⁷ Schwartz, D.P., and W.H. Bakun, Workshop: "Geological Structures Beneath South San Francisco Bay - A Seismic Hazard", U.S. Geological Survey Coordinating Organization for Northern California Earthquake Research and Technology (CONCERT), June 7, 1994, reported in the *San Francisco Chronicle*, June 8, 1994.

⁸ Working group on California earthquake probabilities, *op.cit.*

⁹ Liquefaction: a response to severe groundshaking that can occur in loose soils. This transformation from a solid state to a liquid state ("quicksand"), as a response to seismically induced groundshaking, can cause ground settling and landsliding.

¹⁰ URIS/John A. Blume and Associates, *San Francisco Seismic Safety Investigation*, 1974. Groundshaking intensities that would result from a major earthquake were projected and classified on a five-point scale ranging from E (Weak) through A (Very Violent).

¹¹ San Francisco City Planning Department, *Downtown Plan Environmental Impact Report*, EE81.3, certified November, 1985, pp. IV.K.5a to K.9.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

4. Water. Would the proposal result in:

- a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?
- b) Exposure of people or property to water related hazards such as flooding?
- c) Discharge into surface waters or other alteration of surface water quality (e.g. temperature, dissolved oxygen turbidity)?
- d) Changes in the amount of surface water in any water body?
- e) Changes in currents, or the course or direction of water movements?
- f) Change in the quantity of ground waters, either through

additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?

g) Altered direction or rate of flow of groundwater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Impacts to groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Substantial reduction in the amount of groundwater otherwise available for public water supplies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is currently covered by impervious surfaces. The project would replace the 170 Fell street building with a new structure with a similar footprint. The site would continue to be covered by the 135 Van Ness Avenue building, a paved central courtyard, the Nourse Auditorium and the new 170 Fell Street building. The project would improve the drainage patterns of the site. Site runoff would continue to drain into the City's combined sanitary and storm drainage system. The project could improve water quality because the parking on the current site would be eliminated. Construction of the new 170 Fell Street building would not require any excavation, except for minor excavation for the foundation. No further analysis of this topic is required in the EIR.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
5. <u>Air Quality</u> . Would the proposal:				
a) Violate any air quality standard or contribute to an existing projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Expose sensitive receptors to pollutants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Alter air movement, moisture, or temperature, or cause any change in climate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create objectionable odors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Air Quality - Two types of air quality impacts could be expected from the proposed project: long term impacts related to use and operation of the project and short-term impacts from construction. Project-specific as well as cumulative traffic increases can be expected to contribute to existing air pollution near the project site.

The Bay Area Air Quality Management District (BAAQMD) has established thresholds for projects requiring its review for potential air quality impacts. These thresholds are based on the minimum size projects which the District considers capable of producing air quality problems.

The proposed project would generate more than 2,000 daily vehicle trips which would exceed the threshold. Therefore, the project would require review under the BAAQMD regulations. The District's concern with the proposed project would be related to vehicular emissions of pollutants resulting from trips to and from the project and potential contribution to curbside exceedance of the state and federal 8-hour carbon monoxide (CO) standard along Van Ness Avenue and standards for nitrogen oxides (NO), reactive hydrocarbons (RHC), and particulates (PM-10). The potential air quality impacts of project-related automobile emissions during project operation will be discussed in the EIR.

Regarding construction air quality, excavation and construction activities could temporarily affect local air quality in the vicinity for a period of 24 months, causing a temporary increase in particulate dust and other pollutants. Dust emission during excavation would increase particulate concentrations near the site. Dustfall can be expected at times on surfaces within 200 to 800 feet. Under high winds exceeding 12 miles per hour, localized effects including human discomfort might occur downwind from blowing dust. Construction dust is composed primarily of large particles that settle out of the atmosphere more rapidly with increasing distance from the source. More of a nuisance than a hazard for most people, this dust could affect persons with respiratory diseases, as well as sensitive electronics or communications equipment. The project sponsor would require the contractor to wet down the construction site twice a day during construction to reduce particulates, would require covering soil and other materials, would require the covering of debris, soil and other material being hauled from the site, and would require street sweeping around the construction site at least once per day. (See mitigation measure 1, page 20.)

Diesel-powered equipment would emit, in decreasing order by weight, nitrogen oxides, carbon monoxide, sulfur oxides, hydrocarbons, and particulates. These emissions would increase local concentrations temporarily but would not be expected to increase the frequency of violations of air quality standards. The project sponsor would require the project contractor to maintain and operate construction equipment in such a way as to minimize exhaust emissions. (See mitigation measure 1, page 20.) This measure would reduce potential construction air quality impacts to a level of insignificance. Temporary construction-related air quality effects require no further analysis and will not be discussed in the EIR.

The massing of the project would be similar to that of the existing buildings and would not change the existing wind currents. The wind effects of the proposed project on pedestrians would not be expected to change. This topic will not be discussed in the EIR.

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------	--	------------------------------	-----------

6. Transportation/Circulation. Would the proposal result in:

a) Increased vehicle trips or traffic congestion?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Inadequate emergency access or access to nearby uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Insufficient parking capacity on-site or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Hazards or barriers for pedestrians or bicyclists?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflicts with adopted policies supporting transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Rail, waterborne or air traffic impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project would not provide vehicle parking and there would be no vehicular access to the site. The SOTA complex would be serviced from Franklin Street where there would be one loading space between the Nourse Auditorium and the new 170 Fell Street building. The project would cause an increase in area traffic, transit and parking demand. The EIR will discuss potential effects of the project related to

traffic and circulation, transit, and parking. Potential traffic impacts during construction will also be discussed in the EIR.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

7. Biological Resources. Would the proposal result in impacts to:

- a) Endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?
- b) Locally designated species (e.g., heritage trees)?
- c) Locally designated natural communities (e.g., oak forest, coastal habitat, etc.)?
- d) Wetland habitat (e.g., marsh, riparian and vernal pool)?
- e) Wildlife dispersal or migration corridors?

Except for the narrow strips of landscaping, the project site is mostly covered with impervious surfaces and is located within an urban area which has been intensively developed since the late-nineteenth century. No plants or animals could be affected by the project. No further analysis is required and this topic will not be included in the EIR.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

8. Energy and Mineral Resources. Would the proposal:

- a) Conflict with adopted energy conservation plans?
- b) Use non-renewable resources in a wasteful and inefficient manner?
- c) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?

New buildings in San Francisco are required to conform to energy conservation standards specified by Title 24 of the California Code of Regulations. Compliance with these standards is required prior to the issuance of the building permit or an addendum to the site permit. Title 24 is enforced by the Department of Building Inspection.

Energy impacts requires no further analysis and will not be discussed in the EIR.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

9. Hazards. Would the proposal involve:

- a) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?
- b) Possible interference with an emergency response plan or emergency evacuation plan?
- c) The creation of any health hazard or potential health hazard?
- d) Exposure of people to existing sources of potential health hazards?
- e) Increased fire hazard in areas with flammable brush, grass, or trees?

Asbestos-containing materials (ACMs), lead-based paint (LBP) and pigeon feces containing material are located in the existing buildings on the site (primarily in the 170 Fell Street building and the gymnasium wing of the 135 Van Ness Avenue Building).¹ Light fixtures containing polychlorinated biphenyls (PCBs) may also be in the existing buildings. All friable asbestos, LBPs, pigeon feces, and light fixtures with PCB ballasts would be removed or contained as part of the proposed project. The Bay Area Air Quality Management District (BAAQMD) is vested by the California legislature with authority to regulate airborne pollutants, including asbestos and LBPs, through both inspection and law enforcement, and is to be notified ten days in advance of any proposed demolition or abatement work. (See mitigation measure number 2, page 20.) No demolition permit may be issued unless approved by the BAAQMD.

Notification includes the names and addresses of operations and persons responsible; description and location of the structure(s) including size, age and prior use, and the approximate amount of friable asbestos and LBPs; scheduled starting and completion dates of abatement; nature of planned work and methods to be employed; procedures to be employed to meet BAAQMD requirements; and the name and location of the waste disposal site to be used. The District randomly inspects asbestos and LBP removal operations. In addition, the District will inspect any removal operation concerning which a complaint has been received.

Asbestos and LBP removal contractors must be certified as such by the Contractors Licensing Board of the State of California. The contractor would manage asbestos materials and the lead-based paint on building materials in accordance with the local office of the State Occupational Safety and Health Administration (Cal-OSHA), Department of Toxic Substance Control (DTSC), and BAAQMD regulations, and federal, state and local laws including Titles 22 and 23 of the *California Code of Regulations* and the City's *Hazardous Materials Ordinance*. Cal-OSHA must be notified of asbestos and lead paint abatement to be carried out. Asbestos abatement contractors must follow state regulations where there is asbestos-related work involving 100 square feet or more of asbestos-containing material. The owner of the property where abatement is to occur must have a Hazardous Waste Generator Number assigned by and registered with the Office of the California Department of Health Services in Sacramento. The contractor and hauler of the material is required to file a Hazardous Waste Manifest which details the hauling of the material from the site and the

disposal of it. These regulations and procedures, would insure that any potential impacts due to asbestos and LBP would be reduced to a level of insignificance.

Light fixtures with PCBs would be removed and disposed of according to the federal regulations for handling materials with PCBs contained in Title 40 of *Code of Federal Regulations*.

Occupants (students, faculty and staff) of the proposed project would contribute to congestion if an emergency evacuation of the Civic Center area were required. An evacuation and emergency response plan would be developed as part of the SOTA project in conformance with the San Francisco Unified School Districts and State Fire and Life Safety regulations for schools.

Hazards and fire safety require no further analysis and will not be discussed in the EIR.

NOTES - Hazards

¹ Engineering Science & Engineering, Inc., *Hazardous Material Considerations for 135 Van Ness - Gym Wing Building, and Hazardous Material Considerations for 170 Fell Street Building*, December 12, 1994. These reports are on file at the San Francisco Unified School District Facilities Management and Operations, 1551 Newcomb Avenue, San Francisco.

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------	--	------------------------------	-----------

10. Noise. Would the proposal result in:

a) Increases in existing noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of people to severe noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The noise environment of the site, like much of San Francisco, is dominated by vehicular traffic noise, including trucks, cars, MUNI buses and emergency vehicles. The nearest sensitive receptors to the project site are residential buildings across Fell Street immediately south of the project. Traffic on Van Ness Avenue is the major noise source in the area.

Construction Noise - Demolition, excavation, and building construction would temporarily increase noise in the site vicinity. The construction period, including demolition would last approximately 24 months, the noisiest period would be the first five months. Demolition of the 170 Fell Street Building would take about three months. Erection of the new building steel frame would require about two months and the exterior finish (skin or siding) would take about three months. The proposed new building at 170 Fell Street would comply with the recommendations of the soils engineer; however, pile driving would not be required. During retrofitting of the 135 Van Ness Building, noise would be contained with the building. Jack Hammers, impact wrenches and other tools could generate high noise levels from time to time.

Project construction would increase noise levels in areas surrounding the project site. Construction noise levels would fluctuate depending on construction phase, equipment type and duration of use, distance between noise source and listener, and presence or absence of barriers between noise source and listener. Throughout the construction period there would be truck traffic to and from the site, hauling away excavated materials, or delivering building materials.

As noted above, the project would not include pile driving and its associated noise and vibration. Since no piledrivers would be used on the project, vibration levels are not expected to be more than barely noticeable at any of the buildings around the project site.

Construction noise is regulated by the San Francisco Noise Ordinance (Article 29 of the City Police Code). The ordinance requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 DBA at a distance of 100 ft. from the source. Impact tools (eg. jackhammers and impact wrenches) must have both intake and exhaust muffled to the satisfaction of the Department of Public Works. Section 2908 of the Ordinance prohibits construction work between 6:00 p.m. and 7:00 a.m., if noise would exceed the ambient noise level by five DBA at the project property line, unless a special permit is authorized by the Director of Public Works. No evening construction activity is proposed for the project.

In summary, during the excavation, foundation and superstructure phases of the 170 Fell Street Building, noise levels would be above existing levels in the project area. There would be times, particularly during the early construction phases, when noise would interfere with indoor activities in the apartment units closest to the site. These impacts would be temporary in nature and limited to the approximately 24-month period of construction, primarily during the first seven months. Construction noise would be reduced by requiring shielding and muffling of construction equipment. Stationary noise sources would be fully enclosed, with openings baffled and located so that they face away from residential uses. Project construction noise requires no further analysis and will not be addressed in the EIR.

Operational Noise - An approximate doubling of traffic volumes in the area would be necessary to produce an increase in ambient noise levels noticeable to most people.¹ The project would not cause a doubling in traffic volumes and, therefore, would not cause a noticeable permanent increase in the ambient noise level in the project vicinity during project operation.

Outdoor student activities would be confined to the courtyard and noise would be attenuated by the surrounded buildings. As equipment noise would be limited to 50 DBA to meet the nighttime limit, it would not be perceptible above the ambient noise levels in the project areas; operational noise requires no further analysis and will not be discussed in the EIR.

NOTES - Noise

¹ See *Downtown Plan EIR*, Vol.1, Section IV.E generally and pp. IV.J.8-18. Increases of one dBA or less in environmental noise are not noticeable by most people outside a laboratory situation (*National Academy of Sciences, Highway Research Board, Research Report*. 117 (1971). (See also *FHWA Highway Traffic Noise Prediction Model, Report #FHWA-RD-77-108*, December 1978, p. 8, regarding doubling of traffic volumes producing increases of 3 dBA or more, which are noticed by most people.)

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

11. Public Services. Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:

a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Public protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

d) Maintenance of public facilities, including roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other governmental services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The rehabilitated 135 Van Ness Avenue Building and the new 170 Fell Street Building would have a supervised fire alarm program; the buildings would be protected by complete sprinkler systems. The proposed project would increase demand for and use of public services on the site, but not in excess of levels expected and provided for in this area. The SOTA project is an educational project and would provide an expansion in school services. Service providers have indicated that the demand attributed to the project would not require additional personnel or equipment.¹ The proposed project's potential effect on public services requires no further analysis and will not be discussed in the EIR.

NOTES - Public Services

¹ Copies of memoranda of telephone conversations with service providers and service provider questionnaire responses are available for review on file at the San Francisco Unified School District Facilities Management and Operations, 1551 Newcomb Avenue, San Francisco.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

12. Utilities and Service Systems. Would the proposal result

in a need for new systems or supplies, or substantial alterations to the following utilities:

a) Power or natural gas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Communications systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Local or regional water treatment or distribution facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Sewer or septic tanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Storm water drainage?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Solid waste disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Local or regional water supplies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project would increase demand for and use of utilities on the site, and increase water and energy, but not in excess of levels expected and provided for in this area. Service providers have indicated that demand attributed to the project would not require additional personnel or equipment.¹ The proposed project's potential effect on utilities and service systems requires no further analysis and will not be discussed in the EIR.

NOTES - Utilities and Service Systems

¹ Copies of memoranda of telephone conversations with service providers and service provider questionnaire responses are available for review on file at the San Francisco Unified School District Facilities Management and Operations, 1551 Newcomb Avenue, San Francisco.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

13. Aesthetics. Would the proposal:

- a) Affect a scenic vista or scenic highway?
- b) Have a demonstrable negative aesthetic effect?
- c) Create light or glare?

Aesthetics and urban design are subjective fields, and individuals may hold differing opinions about the relative aesthetic merit of any proposed project. The current proposal is no exception. The San Francisco Unified School District has indicated that the design of the new building proposed at 170 Fell Street would complement the adjacent Landmark building in terms of organization, scale, and materials; others may feel differently upon studying the design proposal. Aesthetic and design features of the project will be more fully considered for approval by the Board of the San Francisco Unified School District. Architectural information about the proposed project, will be discussed in the EIR (See Cultural Resources, below).

The EIR will describe features of the project design, as developed at the time of DEIR publication, for informational purposes.

The primary views currently available to the public in the vicinity of the project site are those along public-rights-of-way. The heights of surrounding buildings limit views outside of these rights-of-way. The proposed project would not intrude on any public right-of-way. The 135 Van Ness Avenue portion of the project would be within the existing building envelope; the exterior envelope of the new 170 Fell Street building would be similar to the existing building. Therefore, the existing view corridors adjacent to the project site would not be altered. Views require no further analysis and will not be discussed in the EIR.

The project would not use mirrored or reflective glass, would not include exterior lighting in excess of amounts common and accepted in urban areas. Exterior lighting would be directed to minimize glare on neighboring buildings or streets. It could not, therefore, generate obtrusive light or glare that may impact neighboring properties. Glare requires no further analysis and will not be discussed in the EIR.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

13. Cultural/Architectural/Historic Resources.

Would the proposal:

- a) Disturb paleontological resources?
- b) Disturb archaeological resources?
- c) Affect historical resources?
- d) Have the potential to cause a physical change which would affect unique ethnic cultural values?
- e) Restrict existing religious or sacred uses within the potential impact area?

The proposed project would not entail excavation other than the minor excavation for the foundation of the new building at 170 Fell Street. The existing building is partially below grade (three-quarter level). The proposed new building would not be lower than the existing grade. There would be no possibility of encountering any historic or prehistoric archaeological remains at the site. Cultural resources, therefore, require no further analysis and will not be included in the EIR.

The proposed project would rehabilitate the 135 Van Ness Building, (San Francisco City Landmark Number 140, the High School of Commerce Building, designated on December 6, 1981), and demolish the 170 Fell Street Building. The 135 Van Ness Avenue Building received a summary rating of "2" on the 1976 City Planning Department's Architectural Survey, and is listed in the Foundation for San Francisco's Architectural Heritage's (Heritage) secondary survey area. The 170 Fell Street Building is not listed on the 1976 City Planning Department's Architectural Survey. Additional information about the buildings including their architecture and history will be included in the EIR, along with an analysis of the physical changes proposed as part of the project, and their potential to significantly affect the preservation of the 135 Van Ness Avenue City designated Landmark Building and Nourse Auditorium. In addition to analyzing physical changes proposed in terms of historic building fabric and historical context, the EIR will consider potential impacts during construction.

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------	--	------------------------------	-----------

14. Recreation. Would the proposal:

a) Increase the demand for neighborhood or regional parks or other recreational facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Affect existing recreational opportunities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project, as a high school for primarily San Francisco residents, would not increase the demand for recreational facilities nor would it affect any existing recreational opportunities. The School of the Arts would add to the art resources of the Civic Center and to City at large. Recreation requires no further analysis and will not be discussed in the EIR.

C. MITIGATION MEASURES PROPOSED AS PART OF THE PROJECT:

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Discussed</u>
1. Could the project have significant effects if mitigation measures are not included in the project?	<u>X</u>	<u> </u>	<u> </u>	<u>X</u>
2. Are all mitigation measures necessary to eliminate significant effects included in the project?	<u> </u>	<u>X</u>	<u> </u>	<u>X</u>

The following mitigation measures are related to topics determined to require no further analysis in the EIR. The EIR will contain a mitigation chapter describing these measures and also including other measures which would be or could be adopted to reduce potential adverse effects of the project identified in the EIR. The San Francisco Unified School District would implement the following mitigation measures as part of the project:

1. **Construction Air Quality:** The SFUSD would require the contractor(s) to spray the site with water during demolition, excavation, and construction activities; spray unpaved construction areas with water at least twice per day; cover stockpiles of soil, sand, and other material; cover trucks hauling debris, soils, sand or other such material; and sweep surrounding streets during demolition, excavation, and construction at least once per day to reduce particulate emissions. The SFUSD would require that the contractor(s) obtain reclaimed water from the Clean Water Program for this purpose.

The SFUSD would require the project contractor(s) to maintain and operate construction equipment so as to minimize exhaust emissions of particulates and other pollutants, by such means as a prohibition on idling motors when equipment is not in use or when trucks are waiting in queues, and implementation of specific maintenance programs to reduce emissions for equipment that would be in frequent use for much of the construction period.

2. **Hazardous Materials:** The SFUSD would employ a licensed asbestos abatement contractor registered with Cal-OSHA to remove all asbestos containing building materials (ACBMs) prior to demolition of the 170 Fell Street building. The contractor would manage asbestos materials in accordance with Cal-OSHA, U.S. Environmental Protection Agency (EPA), Department of Toxic Substance Control (DTSC), and the Bay Area Air Quality Management District (BAAQMD) regulations, and federal, state and local laws, including Titles 22 and 23 of the *California Code of Regulations* and the *City's Hazardous Materials Ordinance*. The Bay Area Air Quality Management District (BAAQMD) is vested by the California legislature with authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement, and is to be notified ten days in advance of any proposed demolition or abatement work.

Project activities expected to disturb lead-based paint materials would be performed by licensed and certified contractors. The contractor would manage the lead-based paint on building materials in accordance with Cal-OSHA, DTSC and BAAQMD regulations and the applicable federal, state and local laws, including Titles 22 and 23 of the *California Code of Regulations* and the *City's Hazardous Materials Ordinance*. The contractor would comply with the Lead Construction Standard and would provide medical surveillance with blood lead testing, respirator training and fit-testing, training on health hazards of lead, and site security for the site workers.

Light fixtures with PCBs would be removed and disposed of according to the federal regulations for handling materials with PCBs contained in Title 40 of Code of Federal Regulations.

3. **Noise: Construction Noise:** The SFUSD would require the contractor(s) to implement the following construction noise reduction strategies: 1) limit construction hours to between 7:00 a.m. and 6:00 p.m., unless night work is reviewed and authorized by the Department of Public Works, 2) require use of construction equipment with noise reduction devices, such as mufflers which are in good condition; 3) minimize the use of impact tools to the extent possible; 4) locate stationary noise sources, when feasible, away from residential areas, and 5) require use of acoustic shielding with such equipment when feasible and appropriate. These mitigation measures would not, in all cases eliminate entirely the consequential and temporary construction impacts.

Operational Noise: The SFUSD would prohibit night-time or early morning (i.e., between 10 p.m. to 7 a.m.) supply deliveries at the proposed Franklin Street loading dock. The SFUSD would limit noise from fixed machinery or equipment (e.g. pumps, ventilation fans, air conditioning apparatus) to 50 DBA during the night and 55 DBA during the day at the property line of the nearest residential property as required by the San Francisco Noise Ordinance.

D. ALTERNATIVES

Alternatives to the proposed project will be defined further and described in the EIR. The alternatives proposed to be analyzed will include the following:

1. A No Project Alternative in which the site would remain in its existing condition.
2. A Preservation and Adaptive Reuse of 170 Fell Street Alternative, which would examine the rehabilitation and seismic retrofitting of the existing building damaged in the Loma Prieta Earthquake of 1989.
3. A Non-SOTA Use Alternative for the 170 Fell Street Site which would examine office/commercial or residential uses for the building.

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------	--	------------------------------	-----------

E. MANDATORY FINDINGS OF SIGNIFICANCE

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- b) Does the project have the potential to achieve short-term to the disadvantage of long-term, environmental goals?
- c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)
- d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The project would rehabilitate an architectural resource, that is, the Landmark building at 135 Van Ness Avenue, would demolish the existing 170 Fell Street Building and replace it with a structure of similar size, massing and scale, and would have transportation and related air quality impacts that could be potentially significant. The EIR will consider and evaluate these issues and impacts.

E. ON THE BASIS OF THIS INITIAL STUDY

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.



TIM TRONSON
Environmental
Review Officer
for
San Francisco
Unified School District

Date: 6/3/96

APPENDIX B: ARCHITECTURAL RESOURCES

The architectural ratings discussed in the text of this report include the results of three separate architectural evaluation surveys: the 1976 San Francisco Department of City Planning Citywide Architectural Survey, the Heritage Survey, and the Unreinforced Masonry Building (UMB) Survey. These are discussed below.

SAN FRANCISCO DEPARTMENT OF CITY PLANNING CITYWIDE ARCHITECTURAL SURVEY

Between 1974 and 1976, the San Francisco Department of City Planning conducted a citywide inventory of architecturally significant buildings. An advisory review committee of architects and architectural historians assisted in the final determination of ratings for the 10,000 buildings, the results of which were entered in an unpublished 60-volume record of the inventory. The rated buildings are also represented on a set of color-coded maps which identify the location and relative significance of each building surveyed. The inventory and maps are on file at the Department of City Planning.

The inventory assessed the architectural significance of the surveyed structures from the standpoint of overall design and particular design features. Both contemporary and older buildings were included, but historical associations were not considered. Each building was given two numerical ratings, one for architectural quality and one for overall architectural significance, urban design context, and environmental significance. The latter rating is referred to in this report. The ratings ranged from a low of "0" to a high of "5." The architectural survey resulted in a listing of the best 10 percent of San Francisco's buildings. In the estimation of the inventory participants, buildings rated "3" or higher represent approximately the best 2 percent of the City's architecture.

HERITAGE SURVEY

The Foundation for San Francisco's Architectural Heritage, through its consultants, Charles Hall Page & Associates, Inc., conducted an architectural and historical survey of all downtown structures as well as the Van Ness Corridor, South of Market, North of Market, Civic Center, Chinatown, and currently the Richmond District. In 1979, the original inventory results were published in the book *Splendid Survivors* (Foundation for San Francisco's Architectural Heritage, *Splendid Survivors*, California Living Books, San Francisco, 1979). Criteria considered in rating the buildings for both surveys include Architectural Significance, Historic context and Negative Alterations. Summary ratings from "A" to "D" were assigned to each building on the basis of these scores. The summary ratings, as described on pages 12 and 13 of *Splendid Survivors*, are listed below:

- A. **Highest Importance.** Individually the most important buildings in downtown San Francisco, distinguished by outstanding qualities or architecture, historical values, and relationship to the environment. All A-group buildings are eligible for the National Register, and of highest priority for City Landmark status.

- B. **Major Importance.** Buildings which are of individual importance by virtue of architectural, historic and environmental criteria. These buildings tend to stand out for their overall quality rather than for any particular outstanding characteristics. B-group buildings are eligible for the National Register, and secondary priority for City Landmark status.

The Landmarks Preservation Advisory Board does not distinguish between "A" rated and "B" rated buildings for purposes of preservation.

- C. **Contextual Importance.** Buildings which are distinguished by their scale, materials, compositional treatment, cornice, and other features. They provide the setting for more important buildings and add visual richness and character to the downtown area. Many C-group buildings may be eligible for the National Register as part of historic districts.
- D. **Minor or No Importance.** Buildings which are insignificant examples of architecture by virtue or original design, or more frequently, insensitive remodeling. This category includes vacant buildings and parking lots. Most D-group buildings are sites of opportunity.

Not Rated. Buildings which have been built or suffered insensitive exterior remodelings since 1945.

UNREINFORCED MASONRY BUILDING (UMB) SURVEY

In November of 1990, the Landmarks Preservation Advisory Board completed *A Context Statement and Architectural/Historic Survey of Unreinforced Masonry Building (UMB) Construction in San Francisco from 1850 to 1940*. This survey was adopted by the LPAB at its regular meeting of February 6, 1991, and is available at the Department of City Planning and contains ratings for 2,000 buildings citywide. This project was funded in part, through the National Historic Preservation Fund Grant No. 66-89-40107 by the State Office of Historic Preservation.

APPENDIX C: TRANSPORTATION

LEVEL OF SERVICE DESIGNATIONS

Existing and future traffic conditions at signalized intersections within the primary study area have been evaluated using the TRAF-NETSIM Traffic Simulation Model. Conditions at signalized intersections in the secondary study area have been evaluated using the *1985 Highway Capacity Manual* (Transportation Research Board, 1985) operations methodology. Both methodologies use the concept of Level of Service (LOS), which, for signalized intersections, is defined in terms of delay, or waiting time at a signal. Delay is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Intersection LOS, determined according to the vehicle delay in seconds per vehicle, range from LOS A (very low delay) to LOS F (forced flow). Table C-1 (page 9-26) provides more detailed descriptions of the six LOS, A through F, for signalized intersections using the *1985 Highway Capacity Manual* method. The TRAF-NETSIM simulation calculates LOS in much the same way, with similar results, but refines the analysis based on signal progression along streets, such as the Embarcadero, and based on spill-back, when queues from one intersection extend back to a previous intersection.

In the past, for planning applications, the City of San Francisco has used a slightly different methodology than the TRAF-NETSIM or *1985 Highway Capacity Manual* to analyze operations at signalized intersections. That method, known as the *Critical Lane Analysis* (Transportation Research Circular Number 212, Transportation Research Board, 1980), determines the ratio of critical opposing traffic volumes to theoretical intersection capacity, yielding the volume-to-capacity (v/c) ratio. Intersection LOS, determined according to the value of the v/c ratio, range from LOS A (free flowing condition) to LOS F (severely congested conditions). Table C-2 (page 9-27) provides more detailed descriptions of the six LOS, A through F, for signalized intersections using the *Critical Lane Analysis* methodology.

TABLE C-1
SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS BASED ON DELAY

LEVEL OF SERVICE	TYPICAL DELAY (SEC/VEH)	TYPICAL TRAFFIC CONDITION
A	≤ 5.0	Insignificant Delays: No approach phase is fully utilized and no vehicle waits longer than one red indication.
B	5.1 - 15.0	Minimal Delays: an occasional approach phase is fully utilized. Drivers begin to feel restricted.
C	15.1 - 25.0	Acceptable Delays: Major approach phase may become fully utilized. Most drivers feel somewhat restricted.
D	25.1 - 40.0	Tolerable Delays: Drivers may wait through more than one red indication. Queues may develop but dissipate rapidly, without excessive delays.
E	40.1 - 60.0	Significant Delays: Conditions are generally the limit of acceptable delays. Vehicles may wait through several signal cycles and long queues of vehicles from upstream.
F	> 60.0	Excessive Delays: Represents unacceptable conditions with extremely long delays. Queues may block upstream intersections.

Sources: *Highway Capacity Manual*, Highway Research Board, Special Report No. 209, Washington, D.C., 1985; *Interim Materials on Highway Capacity*, Circular 212, Transportation Research Board, 1980; Korve Engineering.

TABLE C-2
ARTERIAL LEVEL OF SERVICE DEFINITIONS BASED ON TRAVEL SPEED

ARTERIAL CLASS	I	II	III
RANGE OF FREE FLOW SPEEDS (mph)	45 to 35	35 to 30	35 to 25
TYPICAL FREE FLOW SPEED (mph)	40	35	27
LEVEL OF SERVICE	AVERAGE TRAVEL SPEED (mph)		
A	≥ 35	≥ 30	≥ 25
B	≥ 28	≥ 24	≥ 19
C	≥ 22	≥ 18	≥ 13
D	≥ 17	≥ 14	≥ 9
E	≥ 13	≥ 10	≥ 7
F	< 13	< 10	< 7

Level of Service A:	Primarily free-flow operations at average travel speeds, usually about 90 percent of the free flow speed for the arterial class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.
Level of Service B:	Reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free flow speed for the arterial class. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension.
Level of Service C:	Stable operations. However, ability to maneuver and change lanes in mid-block locations may be more restricted than in LOS B, and longer queues and/or adverse signal coordination may contribute to lower average travel speeds of about 50 percent of the average free flow speed for the arterial class. Motorists will experience an appreciable tension while driving.
Level of Service D:	Borders on a range on which small increases in flow may cause substantial increases in approach delay and, hence, decreases in arterial speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40 percent of free flow speed.
Level of Service E:	Significant approach delays and average travel speeds of one-third the free flow speed or lower. Such operations are caused by some combination of adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing.
Level of Service F:	Extremely low speeds below one-third to one-quarter of the free flow speed. Intersection congestion is likely at critical signalized locations, with high approach delays resulting. Adverse progression is frequently a contributor to this condition.

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, 1980.

Although the two methodologies for calculating the LOS differ, there is usually a good correlation between the LOS calculated using either method of analysis. It is only when high levels of congestion occur that differences between the two methodologies may be more apparent. As an example, using the *1985 Highway Capacity Manual* methodology, an intersection may be operating at a LOS F, with poor traffic progression, many signal cycle failures and vehicle delays above 60 seconds per vehicle; however, the v/c ratio could be below one, which would mean a LOS E using the *Critical Lane Analysis* methodology. Conversely, using the *1985 Highway Capacity Manual* methodology, an intersection may be operating at LOS D, with an efficient signal progression handling large traffic volumes; however, the v/c ratio could be above 0.9, which would mean a LOS E using the *Critical Lane Analysis* methodology.

PEDESTRIAN ANALYSIS

Pedestrian LOS were calculated using the Pushkarev and Zupan's *Urban Space for Pedestrians* (MIT Press, 1975). For pedestrian crosswalks, pedestrian flow rates, or the number of pedestrians passing a point per unit of time, are the basis for the flow regime designation. The flow rate is calculated using the width of the crosswalk and the number of pedestrians using the crosswalk per peak 15-minute period. Qualitatively, the flow regime indicates the "freedom to choose desired speeds and to bypass others." Table C-3 (page 9-29) shows the relationship between pedestrian flow rates and the flow regimes (categories) used to describe levels of operation. Figure C-1 (pages 9-30 and 9-31) shows photographs of pedestrian conditions that correspond to the flow regimes.

TABLE C-3
PEDESTRIAN FLOW REGIMEN

FLOW REGIME	CHOICE	CONFLICTS	FLOW RATE (p/f/m) ^a
Open	Free Selection	None	less than 0.5
Unimpeded	Some Selection	Minor	0.5 to 2.0
Impeded	Some Selection	High Indirect Interaction	2.1 to 6.0
Constrained	Some Restriction	Multiple	6.1 to 10.0
Crowded	Restricted	High Probability	10.1 to 14.0
<u>Design Limit - Upper Limit of Desirable Flow</u>			
Congested	All Reduced	Frequent	14.1 to 18.0
Jammed	Shuffle Only	Unavoidable	Not applicable ^b

Notes: ^a p/f/m = Pedestrians per foot of effective sidewalk width per minute.

^b For Jammed Flow, the (attempted) flow rate degrades to zero at complete breakdown.

Source: *Urban Space for Pedestrians*, MIT Press, 1976, Cambridge, MA.

JAMMED FLOW. Space per pedestrian in this view is about 3.8 sq ft (0.35 m^2). This is representative of the lower half of the speed-flow curve, where only shuffling movement is possible and even the extremely un-

comfortable maximum flow rate of 25 people per min per ft (82 per m) of walkway width cannot be attained due to lack of space. Photograph by Louis B. Schlivek.



The threshold of CONGESTED FLOW. The first eleven people in the view have about 16 sq ft (1.5 m^2) per person, corresponding to a flow rate of about 15 people per min per ft (49 per m) of walkway width. The beginnings of congestion are evident in bodily conflicts affecting at least three of the walkers, and in blocked opportunities for walking at a normal pace.

The onset of CROWDED FLOW, with an average of about 24 sq ft (2.2 m^2) per person, or a flow rate of about 10 people per min per ft (33 per m) of walkway width. Choice of speed is partially restricted, the probability of conflicts is fairly high, passing is difficult. Voluntary groups of two, of which two can be seen in the picture, are maintained, but cause interference. Note also some overflow into the vehicular roadway in the background.

The midpoint of the CONSTRAINED FLOW range, with about 30 sq ft (2.8 m^2) per person, or a flow rate of about 8 people per min per ft (26 per m) of walkway width. The choice of speed is occasionally restricted, crossing and passing movements are possible, but with interference and with the likelihood of conflicts. The man in the dark suit seems to be able to cross in front of the two women in the foreground quite freely, but in the background near the curb people are having difficulty with passing maneuvers.

Case No. 94.618E 1000 Van Ness Avenue

Source: Pushkarev and Zupon



The midpoint of the IMPEDED FLOW range, with about 75 sq ft (6.9 m^2) per person, or a flow rate of about 4 people per min per ft (13 per m) of walkway width. Physical conflicts are absent, but pedestrian navigation does require constant indirect interaction with others. This rate of flow is recommended as an upper limit for the design of outdoor walkways in shopping districts and other dense parts of downtown areas.



91 Space Related to Speed and Flow



The borderline between IMPEDED and UNIMPEDED FLOW, with about 130 sq ft (12 m^2) per person, or a flow rate of about 2 people per min per ft (6.5 per m) of walkway width. Individuals as well as couples visible in this view have a choice of speed and direction of movement. This rate of flow is recommended for design of outdoor walkways in office districts and other less dense parts of downtown areas.

The uneven nature of UNIMPEDED FLOW. While the people walking in the plaza—which is 17 ft (5.2 m) wide, compared to 23 ft (7 m) in the preceding picture—have almost 130 sq ft (12 m^2) per person on the average, the space allocation for the eight individuals in the foreground is closer to 70 sq ft (6.4 m^2). Thus, indirect interaction with others is still quite frequent in the upper range of UNIMPEDED FLOW.

Lower range of UNIMPEDED movement, approaching OPEN FLOW. About 350 sq ft (32.2 m^2) per person, or a flow rate of less than 1 person per min per ft (3.3 per m) of walkway width. Complete freedom to select the speed and direction of movement; individuals behave quite independently of each other. For a design standard based solely on pedestrian density, this amount of space can be considered excessive.

APPENDIX D: AIR QUALITY

TABLE D-1
SAN FRANCISCO AIR POLLUTANT SUMMARY, 1991-1994^b

POLLUTANT	STANDARD	Monitoring Data by Year ^d			
		1990	1991	1992	1993
OZONE (O ₃)					
Highest 1-hr average, ppm ^b	0.09 ^c	0.06	0.05	0.08	0.08
Number of standard excesses		0	0	0	0
CARBON MONOXIDE (CO)					
Highest 1-hr average, ppm	20.0 ^c	12.8	8.0	8.0	7.0
Number of standard excesses		0	0	0	0
Highest 8-hr average, ppm	9.0 ^c	6.5	6.4	5.0	4.4
Number of standard excesses		0	0	0	0
NITROGEN DIOXIDE (NO ₂)					
Highest 1-hr average, ppm	0.25 ^c	0.10	0.09	0.08	0.05
Number of standard excesses		0	0	0	0
SULFUR DIOXIDE (SO ₂)					
Highest 1-hr average, ppm	0.25 ^c	0.013	0.011	0.012	0.005
Number of standard excesses		0	0	0	0
PARTICULATE MATTER (PM-10)					
Highest 24-hr average, ug/m ³	50 ^c	<u>165</u>	<u>109</u>	<u>81</u>	<u>69</u>
Number of standard excesses ^e		12	15	9	5
Annual Geometric Mean, ug/m ³	30 ^c	27.8	29.6	27.6	25.1
LEAD					
Highest 30-day average, ug/m ³	1.5 ^d	0.10	0.05	0.02	0.02
Number of standard excesses		0	0	0	0

Underlined values indicate violation of standards.

Notes: ^a CO data were collected at the BAAQMD monitoring station at 939 Ellis Street; all other data were collected at the Arkansas Street Station.

^b ppm = parts per million; ug/m³ = micrograms per cubic meter.

^c State standard, not to be exceeded.

^d State standard, not to be equalled or exceeded.

^e Measured every sixth day.

Source: California Air Resources Board, *California Air Quality Data*, Vols. XXII-XXV, 1991-1994.

U.C. BERKELEY LIBRARIES



C124919865

